

# VE268 Roll Grooving Tool



OGS  
OGS-200  
EndSeal™

| ⚠ WARNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>Failure to follow instructions and warnings could result in death or serious personal injury, property damage, and product damage.</p> <ul style="list-style-type: none"><li>• Before operating or servicing any pipe preparation tools, read all instructions in the operating and maintenance manual and all warning labels on the tool.</li></ul> |
| <ul style="list-style-type: none"><li>• Wear safety glasses, hardhat, foot protection, and hearing protection while working around pipe preparation tools.</li><li>• Save the operating and maintenance manual in a place accessible to all operators of the tool.</li></ul> <p>If you need additional copies of any literature, or if you have questions concerning the safe and proper operation of any pipe preparation tools, contact Victaulic, P.O. Box 31, Easton, PA 18044-0031, Phone: 1-800-PICK VIC, E-Mail: <a href="mailto:pickvic@victaulic.com">pickvic@victaulic.com</a></p> |                                                                                                                                                                                                                                                                                                                                                         |

*Original Instructions*



**TABLE OF CONTENTS**

|                                                                                                              |           |                                                                                                          |           |
|--------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------|-----------|
| <b>Hazard Identification</b> . . . . .                                                                       | <b>2</b>  | Arbor Installation Procedure for 2-inch/<br>60.3-mm and Larger Sizes . . . . .                           | <b>33</b> |
| <b>Operator Safety Instructions</b> . . . . .                                                                | <b>2</b>  | Lower Roll Installation for<br>2-inch/60.3-mm And Larger Sizes . . . . .                                 | <b>34</b> |
| <b>Introduction</b> . . . . .                                                                                | <b>4</b>  | Travel Stop Knob Installation . . . . .                                                                  | <b>34</b> |
| Receiving the Tool . . . . .                                                                                 | 4         | <b>Maintenance</b> . . . . .                                                                             | <b>36</b> |
| Container Contents . . . . .                                                                                 | 4         | Lubrication . . . . .                                                                                    | 36        |
| Tool Return or Disposal . . . . .                                                                            | 4         | Checking and Filling Hydraulic Oil . . . . .                                                             | 38        |
| <b>Power Requirements</b> . . . . .                                                                          | <b>5</b>  | Replacing Hydraulic Oil and Filter . . . . .                                                             | 38        |
| Power Hookup . . . . .                                                                                       | 5         | Air Bleeding . . . . .                                                                                   | 38        |
| <b>Tool Nomenclature</b> . . . . .                                                                           | <b>6</b>  | Checking the Gear Reducer Oil Level . . . . .                                                            | 41        |
| <b>Tool Dimensions and Specifications</b> . . . . .                                                          | <b>7</b>  | <b>Recommended Lubricants</b> . . . . .                                                                  | <b>41</b> |
| <b>Tool Setup</b> . . . . .                                                                                  | <b>8</b>  | <b>Legacy Tool Features</b> . . . . .                                                                    | <b>42</b> |
| Verification Of Pipe Rotation Direction . . . . .                                                            | 8         | <b>Accessories</b> . . . . .                                                                             | <b>43</b> |
| Emergency Stop Operation . . . . .                                                                           | 10        | <b>Parts Ordering Information</b> . . . . .                                                              | <b>43</b> |
| <b>Preparing Pipe for Grooving</b> . . . . .                                                                 | <b>12</b> | <b>Troubleshooting</b> . . . . .                                                                         | <b>44</b> |
| <b>Pipe Length Requirements</b> . . . . .                                                                    | <b>12</b> | <b>VE268 Ratings - Maximum Pipe Size<br/>and Wall Thickness Capacity<br/>(OGS and OGS-200)</b> . . . . . | <b>45</b> |
| <b>Checking and Adjusting the Tool Prior to<br/>    Grooving</b> . . . . .                                   | <b>14</b> | <b>Roll Part Numbers</b> . . . . .                                                                       | <b>46</b> |
| Grooving Rolls . . . . .                                                                                     | 14        | <b>Link to OGS Groove Specifications</b> . . . . .                                                       | <b>47</b> |
| Groove Diameter Stop Adjustment/<br>Selector Valve Setting . . . . .                                         | 14        | <b>Link to EndSeal “ES” Groove<br/>    Specifications</b> . . . . .                                      | <b>47</b> |
| Adjusting the Roll Guards . . . . .                                                                          | 17        | <b>Link to Copper Tubing Groove<br/>    Specifications</b> . . . . .                                     | <b>47</b> |
| Pipe Stabilizer Adjustment . . . . .                                                                         | 19        | <b>Links to Additional Resources</b> . . . . .                                                           | <b>47</b> |
| Ram Speed Control Valve Adjustment . . . . .                                                                 | 22        | <b>EC Declaration of Conformity</b> . . . . .                                                            | <b>48</b> |
| <b>Grooving Short Pipe Lengths</b> . . . . .                                                                 | <b>23</b> | <b>UK Declaration of Conformity</b> . . . . .                                                            | <b>49</b> |
| <b>Grooving Long Pipe Lengths</b> . . . . .                                                                  | <b>25</b> |                                                                                                          |           |
| <b>Roll Changing</b> . . . . .                                                                               | <b>28</b> |                                                                                                          |           |
| Travel Stop Knob Removal . . . . .                                                                           | 28        |                                                                                                          |           |
| Lower Roll Removal for ¾-inch/26.9-mm<br>and 1 to 1 ½-inch/33.7 to 48.3-mm Sizes . . . . .                   | 29        |                                                                                                          |           |
| Lower Roll Removal For 2-inch/<br>60.3-mm and Larger Sizes . . . . .                                         | 30        |                                                                                                          |           |
| Arbor Removal for 2-inch/60.3-mm<br>and Larger Sizes . . . . .                                               | 31        |                                                                                                          |           |
| Upper Roll Removal - All Sizes . . . . .                                                                     | 31        |                                                                                                          |           |
| Upper Roll Installation - All Sizes . . . . .                                                                | 32        |                                                                                                          |           |
| Lower Roll Assembly Installation for<br>¾-inch/26.9-mm and 1 to 1 ½-inch/<br>33.7 to 48.3-mm Sizes . . . . . | 33        |                                                                                                          |           |

HAZARD IDENTIFICATION

Definitions for identifying the various hazard levels are provided below.



This safety alert symbol indicates important safety messages. When you see this symbol, be alert to the possibility of personal injury.

Carefully read and fully understand the message that follows.

 **DANGER**

- The use of the word “DANGER” identifies an immediate hazard with a likelihood of death or serious personal injury if instructions, including recommended precautions, are not followed.

 **WARNING**

- The use of the word “WARNING” identifies the presence of hazards or unsafe practices that could result in death or serious personal injury if instructions, including recommended precautions, are not followed.

 **CAUTION**

- The use of the word “CAUTION” identifies possible hazards or unsafe practices that could result in personal injury and product or property damage if instructions, including recommended precautions, are not followed.

**NOTICE**

- The use of the word “NOTICE” identifies special instructions that are important but not related to hazards.

OPERATOR SAFETY  
INSTRUCTIONS

The VE268 Roll Grooving Tool is designed for the sole purpose of roll grooving pipe. These instructions must be read and understood by each operator PRIOR to working with the grooving tool. These instructions describe safe operation of the tool, including set up and maintenance. Each operator must become familiar with the tool's operations, applications, and limitations. Particular care should be given to reading and understanding the dangers, warnings, and cautions described throughout these operating instructions.

Operators shall follow all appropriate OSHA guidelines and training. Use of this tool requires dexterity and mechanical skills, as well as sound safety habits. Although this tool is designed and manufactured for safe, dependable operation, it is difficult to anticipate all combinations of circumstances that could result in an accident. The following instructions are recommended for safe operation of this tool. The operator is cautioned to always practice “safety first” during each phase of use, including set up and maintenance. It is the responsibility of the owner, lessee, or user of this tool to ensure that all operators read this manual and fully understand the operation of this tool.

Make this manual readily available in a clean, dry area. Additional copies are available upon request through Victaulic, or can be downloaded at [victaulic.com](http://victaulic.com).

 **DANGER**

1. **Avoid using the tool in potentially dangerous environments.** Do not expose the tool to rain, and do not use the tool in damp or wet locations. Do not use the tool on sloped or uneven surfaces. Keep the work area well lit. Allow sufficient space to operate the tool properly.

2. **Disconnect the power cord from the electrical source before servicing the tool.** Only authorized personnel should perform maintenance on the tool. Always disconnect the power cord from the electrical source before servicing or adjusting the tool. Follow all lock out tag out procedures.
3. **Prevent accidental startups.** Place the power switch in the “OFF” position before connecting the tool to an electrical source.

## **WARNING**

1. **Follow all applicable local and national safety regulations.**
2. **Prevent back injury.** Always follow OSHA guidelines for safe lifting techniques when handling tool components.
3. **Wear proper apparel.** Do not wear loose clothing, jewelry, or anything that can become entangled in moving parts.
4. **Wear protective items when working with tools.** Always wear safety glasses, hardhat, foot protection, and hearing protection.
5. **Keep hands and tools away from grooving rolls and stabilizer roller during the grooving operation.** Grooving rolls can crush or cut fingers and hands. Use pipe of sufficient length.
6. **Do not reach inside pipe ends during tool operation.** Pipe edges can be sharp and can snag gloves, hands, and shirt sleeves.
7. **Operate the tool from the control station side only.** The tool must be operated with the safety foot switch that is located for easy operator access. Never reach across moving parts.
8. **Do not over-reach.** Maintain proper footing and balance at all times. Ensure that the safety foot switch is easily accessible to the operator.
9. **Do not make any modifications to the tool.** Do not remove any safety guarding or any components that would affect tool safety or performance.

## **CAUTION**

1. **The VE268 tool is designed ONLY for roll grooving pipe sizes, materials, and wall thicknesses as designated.**
2. **Inspect the equipment.** Before using the tool, check moveable parts for obstructions. Ensure that tool components are installed and adjusted in accordance with the “Tool Setup” section. Ensure that properly matched roll sets are installed and lubricated.
3. **Stay alert.** Do not operate the tool if impaired by drugs (medicinal or recreational), medication, alcohol, or fatigue.
4. **Keep visitors, trainees, and observers away from the work area.** All visitors should be kept a safe distance from equipment at all times, and should be offered the opportunity to review this manual.
5. **Keep work areas clean.** Keep the work area around the tool clear of any obstructions that could limit movement of the operator. Clean up any spills.
6. **Secure the work, machine, and accessories.** Ensure that the tool is stable. Refer to the “Tool Setup” section.
7. **Support the work.** Support long pipe lengths with a pipe stand, in accordance with the “Long Pipe/Tubing Lengths” section.
8. **Do not force the tool.** Do not force the tool or accessories to perform any functions beyond the capabilities described in these instructions. Do not overload the tool.
9. **Maintain tool with care.** Keep the tool clean at all times to ensure proper and safe performance. Follow the instructions for lubricating tool components.
10. **Use only Victaulic replacement parts and accessories.** Use of any other parts may result in a voided warranty, improper operation, and hazardous situations. Refer to the “Parts Ordering Information” and “Accessories” sections.
11. **Do not remove any labels from the tool.** Replace any damaged or worn labels.

INTRODUCTION

NOTICE

- Drawings and/or pictures in this manual may be exaggerated for clarity.
- The tool, along with this operating and maintenance instructions manual, contains trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic.

The Victaulic VE268 Roll Grooving Tool is a fully motorized, semi-automatic, hydraulic-feed tool for roll grooving pipe to receive Victaulic grooved pipe products. The standard VE268 tool is supplied with rolls for grooving 2 to 12-inch/60.3 to 323.9-mm carbon steel pipe. VE268 rolls are marked with the size and part number, and are color coded to identify the pipe material. For roll grooving to other specifications and materials, refer to the table on page 45. Grooving rolls for other specifications, sizes, and materials must be purchased separately.

CAUTION

- This tool must be used ONLY for grooving pipe/tubing with specifications that fall within the designated parameters.
  - Verify that the upper and lower grooving rolls are a matched set.
- Failure to follow these instructions could damage the tool and cause product failure, resulting in death, personal injury, or property damage.

RECEIVING THE TOOL

VE268 tools are palletized individually in sturdy containers that are designed for repeated shipping. Save the original container for return shipment of rental tools. Tool weight is 735 pounds/333.4 kilograms.

Upon receipt of the tool, ensure that all necessary parts are included. If any parts are missing, contact Victaulic.

CONTAINER CONTENTS

| Qty. | Description                                                                                                  |
|------|--------------------------------------------------------------------------------------------------------------|
| 1    | VE268 Pipe Roll Grooving Tool                                                                                |
| 1    | Lower Roll for 2 to 3 1/2-inch/60.3 to 101.6-mm Carbon Steel Pipe                                            |
| 1    | Lower Roll for 4 to 6-inch/114.3 to 168.3-mm Carbon Steel Pipe.                                              |
| 1    | Upper Roll for 2 to 6-inch/60.3 to 168.3-mm Carbon Steel Pipe.                                               |
| 1    | Roll Set for 8 to 12-inch/219.1 to 323.9-mm Carbon Steel Pipe Mounted on the Tool (Unless Ordered Otherwise) |
| 1    | Guard Setting Pad                                                                                            |
| 1    | Lower Roll Removal Wedge                                                                                     |
| 1    | Travel Stop Knob                                                                                             |
| 1    | Pipe Diameter Tape                                                                                           |
| 1    | Can of Mechanical Assembly Spray                                                                             |
| 1    | Hydraulic System Bleeder Tube                                                                                |
| 1    | Safety Foot Switch                                                                                           |
| 2    | TM-VE268 Operating and Maintenance Instructions Manual                                                       |
| 2    | RP-VE268 Repair Parts List                                                                                   |

TOOL RETURN OR DISPOSAL

Prepare tool for shipment as received. Ensure that chips and debris are thoroughly cleaned from the machine, all fluids are drained, and power is disconnected. VE268 tool, drained fluids, and accessories shall be disposed of or recycled according to local ordinances. Contact Victaulic with questions.

POWER REQUIREMENTS



**⚠ DANGER**

- **ONLY QUALIFIED ELECTRICIANS SHOULD CONNECT INCOMING POWER TO THE TOOL.**

- To reduce the risk of electric shock, check the electrical source for proper grounding.
- Always turn off the main power supply to the tool before making any tool adjustments or before performing any maintenance. Follow all lock out tag out procedures.
- DO NOT alter the plug in any way.

**Failure to follow these instructions could result in death or serious personal injury.**

The VE268 Roll Grooving Tool is designed to operate on several different electrical configurations. There is a 230/460-volt, 3-phase, 60-Hz version and a 380/400/415-volt, 3-phase, 50-Hz version. Please ensure that the power requirement is specified with the accompanying part code on your order.

If the need arises, a 230-volt tool can be converted to operate on 460-volt, and vice-versa. For the 50-Hz version, a 380-volt tool can be converted to operate on 400-volt or 415-volt, and vice-versa.

To convert a tool between voltages, the following changes must be completed:

- 1. Motor Wiring Configuration
- 2. Motor Overload Setting

To convert the tool, refer to the electric schematic(s) in the RP-VE268 Repair Parts List and the information listed on the tool's drive motor.

All VE268 components are grounded to the frame of the tool. Ensure that the frame is grounded properly.

POWER HOOKUP

Each VE268 Roll Grooving Tool is provided with a label that identifies power specifications for the tool (see example below). Reference must be made to this label to ensure proper tool setup.

# VE268



SERIAL NO.

DATE MFD.

| VOLTS | PHASE | HERTZ | FULL-LOAD CURRENT |
|-------|-------|-------|-------------------|
| 230   | 3     | 60    | 11.5 AMPS         |
| 460   | 3     | 60    | 6.5 AMPS          |

**DRIVE MOTOR:**

| VOLTS | PHASE | HERTZ | FULL-LOAD CURRENT |
|-------|-------|-------|-------------------|
| 230   | 3     | 60    | 8.8 AMPS          |
| 460   | 3     | 60    | 4.4 AMPS          |

**SHORT CIRCUIT INTERRUPTING CAPACITY 5,000 AMPS**

- GEAR OIL – AGMA 7
- HYDRAULIC OIL – HIGH-PRESSURE, ANTI-WEAR ISO GRADE 32
- BEARING LUBE – ANTI-WEAR, EXTREME PRESSURE NLGI GRADE 2

ELECTRICAL ASSEMBLY DWG. R-301-268-SCH REVISION LEVEL



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Manufactured in Canada

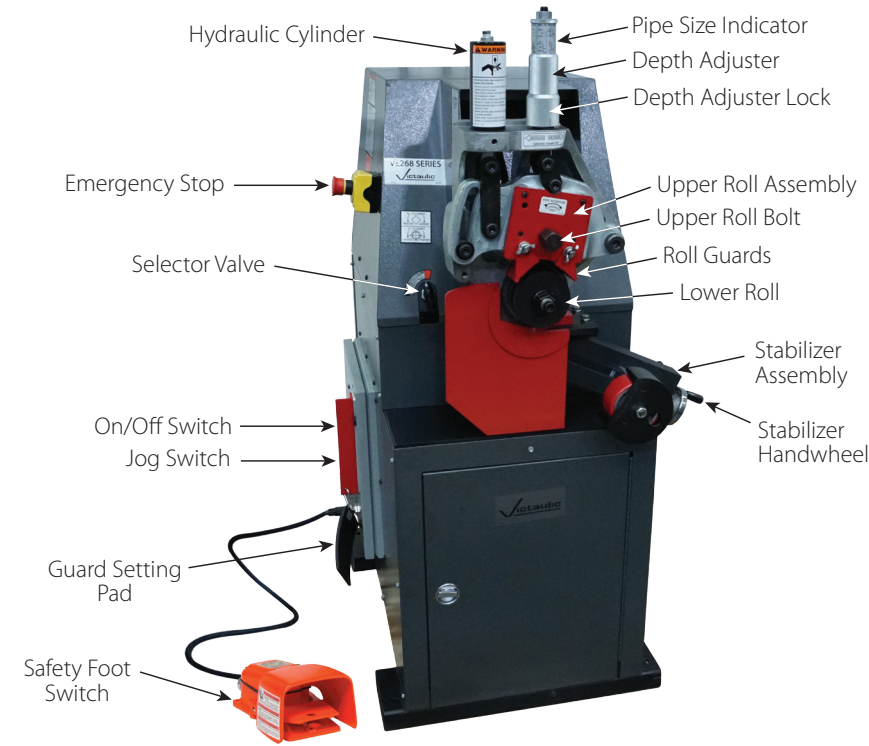
1901 Rev C 01/19/2018

The tool is supplied with a #12/4 power cord (three power, one ground). After the power is connected properly, the tool must be checked for proper rotational direction (refer to “Verification Of Pipe Rotation Direction” on page 8).

TOOL NOMENCLATURE

NOTICE

- Drawings and/or pictures in this manual may be exaggerated for clarity.
- The tool, along with this operating and maintenance instructions manual, contains trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic.



**WARNING**

Grooving rolls can crush or cut fingers and hands.

- Always disconnect the tool from the power source before making any tool adjustments.
- Make sure the guard is adjusted properly before grooving pipe.
- Loading/unloading pipe will place your hands close to the grooving rolls. Keep hands away from the grooving rolls and the roller on the pipe stabilizer during operation.
- Never reach inside the pipe ends or across the tool or pipe during operation.
- Never groove pipe that is shorter than the recommended lengths listed in the operating and maintenance manual.
- Never wear loose clothing, loose gloves, or anything that can become entangled in moving parts.

234 Rev. C 08070326

**WARNING**

Failure to follow instructions and warnings could result in serious personal injury, property damage, and/or product damage.

- Before operating or servicing any pipe preparation tools, read all instructions in the Operating and Maintenance Instructions Manual and all labels on the tool.
- Wear safety glasses, hardhat, foot protection, and hearing protection when working around tools.

If you need additional copies of any literature, or if you have questions concerning the safe and proper operation of any pipe preparation tools, contact Victaulic, P.O. Box 31, Easton, PA 18046-0031, Phone 1-800-PROR VIC, E-Mail: [pcvic@victaulic.com](mailto:pcvic@victaulic.com).

234 Rev. C 081373AB

ALWAYS KEEP THIS PAD WITH THE TOOL. USE IT TO SET THE GUARDS IN ACCORDANCE WITH THE TOOL OPERATION AND MAINTENANCE MANUAL.

4868 Rev. D 0068272LAB

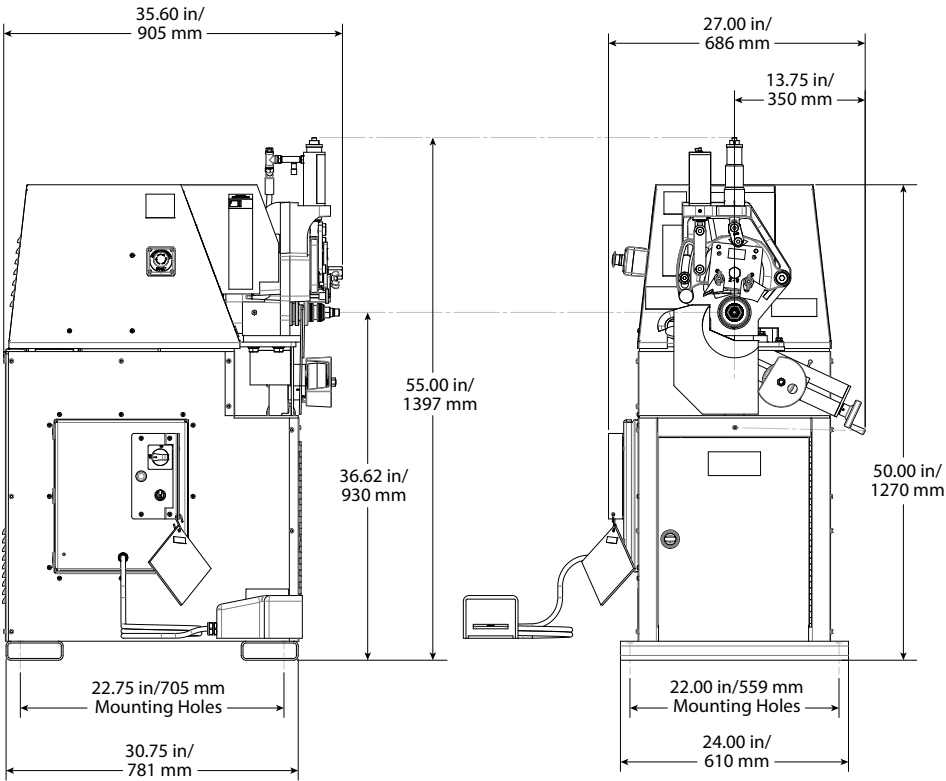
**DANGER**

Contact with hazardous voltage inside this door may result in death or serious personal injury.

- ALWAYS disconnect the tool from the power source before performing maintenance or adjustments.
- Only qualified personnel should open this door.

4038 Rev. B 000404AB

TOOL DIMENSIONS AND SPECIFICATIONS



Tool weight is 735 pounds/333.4 kilograms.

Tool sound pressure is below 70 dB(A).

## TOOL SETUP

### **⚠ WARNING**

- **DO NOT** turn on the main power supply to the tool until instructed otherwise.
- The tool **MUST** be leveled and anchored securely on a concrete floor or base.

**Failure to follow these instructions could result in serious personal injury.**

1. Remove all components from the packaging. Verify that all necessary items are included. Refer to the “Receiving the Tool” section.



2. The VE268 tool is designed for use in a permanent location and must be located on a level concrete floor or base. After an appropriate location is chosen, the tool must be leveled and anchored securely. A non-level tool can severely affect grooving operation and safety. When checking tool level, place the level directly on the frame of the tool, as shown above.

3. Select a location for the tool and pipe stand by taking into consideration the following factors:

- a. The required power supply (refer to the “Power Requirements” section)
- b. Ambient temperature requirements of 20° F to 104° F/-6.7°C to 40° C
- c. A level concrete floor or base for the tool and pipe stand
- d. Adequate space for pipe lengths
- e. Adequate clearance around the tool and stabilizer assembly for adjustment and maintenance (refer to the “Tool Dimensions and Specifications” section)

## VERIFICATION OF PIPE ROTATION DIRECTION

After power is connected, the tool must be checked for proper rotational direction.



1. Turn the power switch on the side of the tool to the “ON” position.

### **⚠ WARNING**

- The motor must not energize until after the “ENABLE” button has been pressed.
- If the motor energizes from a cold start without first being enabled, discontinue use and contact Victaulic.

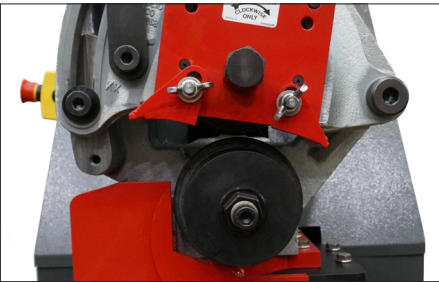
**Failure to follow this instruction could result in serious personal injury.**



2. Press the “ENABLE” button.



3. Depress the safety foot switch, observe the lower roll's rotational direction, then release the safety foot switch.



4. Proper rotation of the lower roll is **clockwise** when viewed from the front of the tool. If rotation is clockwise, power hookup is complete.

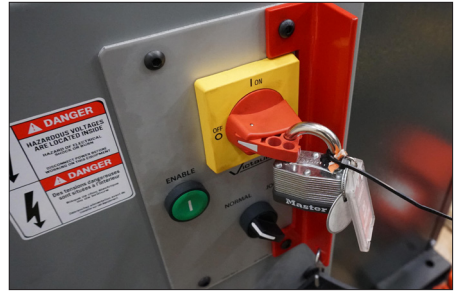


5. If rotation of the lower roll is counterclockwise, turn the power switch on the side of the tool to the "OFF" position and proceed with the following steps.

## ⚠ WARNING

- Always turn off the main power supply to the tool before making any tool adjustments.

Failure to follow this instruction could result in serious personal injury.



6a. Lift and secure the lockout mechanism.



6b. Turn off the main power supply to the tool (main breaker panel, knife switch, etc.). Lock the switch in the "OFF" position to prevent accidental engagement.

**NOTE:** Victaulic does not supply this lockout mechanism.

- Reverse any two of the three power leads at the power source.
- Turn on the main power supply to the tool (main breaker panel, knife switch, etc.).
- Follow steps 1 to 3 to check rotational direction of the lower roll. If rotational direction is not clockwise, contact Victaulic. If rotational direction is clockwise, the power hookup procedure is complete.

EMERGENCY STOP OPERATION

Verify that emergency stop function is operational during tool setup. Perform the “PUSH”, “PULL”, and “ENABLE” actions to test emergency stop function.



1. Turn the power switch on the side of the tool to the “ON” position.

**! WARNING**

- The motor must not energize until after the “ENABLE” button has been pressed.
- If the motor energizes from a cold start without first being enabled, discontinue use and contact Victaulic.

Failure to follow this instruction could result in serious personal injury or death.



2. Press the “ENABLE” button.



3. Depress the safety foot switch, confirm tool operation, then release the safety foot switch.



4. Push the emergency stop button and confirm that this action has cut power to the motor. Depressing the footswitch, pressing the enable button, or adjusting the selector switch should have no effect on the state of the tool. All components should remain off.

**! WARNING**

- The motor must not energize while the emergency stop button is activated.
- If the motor can be energized while the emergency stop button is activated, discontinue use and contact Victaulic.

Failure to follow this instruction could result in serious personal injury or death.



5. Pull the emergency stop button and confirm that power to the motor remains off. Depressing the footswitch, pressing the enable button, or adjusting the selector switch should have no effect on the state of the tool. All components should remain off.

**WARNING**

- The motor must not re-energize until after the “ENABLE” button has been pressed.
- If the motor energizes after an emergency stop without first being enabled, discontinue use and contact Victaulic.

**Failure to follow this instruction could result in serious personal injury or death.**



6. Press the “ENABLE” button.



7. Depress the safety foot switch, confirm tool operation, then release the safety foot switch.



8a. Turn the selector switch on the side of the tool to the “NORMAL” position. The tool head should lower when the footswitch is depressed, and rise to its resting position when the footswitch is released.



8b. Turn the selector switch on the side of the tool to the “JOG” position. The tool head should lower when the footswitch is depressed, and remain in position when the footswitch is released.

8c. Turning the selector switch from “JOG” to “NORMAL” with the head in a lowered position should cause the head to rise to its resting position.

9. If the tool does not function as described, refer to the “Troubleshooting” section.

PREPARING PIPE FOR GROOVING

For proper tool operation and production of grooves that are within Victaulic specifications, the following pipe preparation steps must be followed.

Victaulic recommends square-cut pipe for use with grooved-end pipe products. Square-cut pipe **MUST** be used with Victaulic FlushSeal® and EndSeal® gaskets. For 12-inch/323.9-mm and smaller pipe sizes, beveled-end pipe may be used with Victaulic standard and Vic-Flange gaskets, provided that the wall thickness is standard wall (ANSI B36.10) or less and that the bevel meets ANSI B16.25 (37½°) or ASTM A-53 (30°). **NOTE:** Roll grooving of beveled-end pipe may result in unacceptable pipe flare.

- 1. For 12-inch/323.9-mm and smaller pipe sizes, raised internal and external weld beads and seams must be ground flush with the pipe surface 2 inches/50 mm back from the pipe ends.
- 2. All coarse scale, dirt, and other foreign material must be removed from the interior and exterior surfaces of the pipe ends.

 CAUTION

- For maximum grooving roll life, remove foreign material and loose rust from the interior and exterior surfaces of the pipe ends. Rust is an abrasive material that will wear the surface of grooving rolls.
- Replace grooving rolls that show signs of wear, damage, distortion, or other flaws.

Foreign material may interfere with or damage grooving rolls, resulting in distorted grooves and grooves that are out of Victaulic specifications.

PIPE LENGTH REQUIREMENTS

VE268 tools are capable of grooving short pipe lengths without the use of a pipe stand. Table 1 identifies the minimum pipe lengths that can be grooved safely by using Victaulic Grooving Tools. In addition, this table identifies the maximum pipe lengths that can be grooved without the use of a pipe stand. Refer to the “Grooving Short Pipe Lengths” section for instructions on how to groove short pipe lengths. **NOTE:** Grooved pipe nipples, shorter than those listed in Table 1, are available from Victaulic.

Pipe lengths, longer than those listed in Table 1 (and up to 20 feet/6 meters), must be supported with a pipe stand. Pipe lengths, from 20 feet/6 meters up to double-random lengths (approximately 40 feet/12 meters), must be supported with two pipe stands. Refer to the “Grooving Long Pipe Lengths” section for instructions on how to groove long pipe lengths.

If pipe is required that is shorter than the minimum length listed in Table 1, shorten the next-to-last piece so that the last piece is as long (or longer) than the minimum length specified.

**EXAMPLE:** A 20-foot, 4-inch/6.2-m length of 10-inch diameter steel pipe is required to finish a section, and only 20-foot/6.1-m lengths are available. Instead of roll grooving a 20-foot/6.1-m length of steel pipe and a 4-inch/102-mm length of steel pipe, follow these steps:

- 1. Refer to Table 1, and note that for 10-inch diameter steel pipe, the minimum length that should be roll grooved is 10 inches/255 mm.
- 2. Roll groove a 19-foot, 6-inch/5.9-m length of pipe and a 10-inch/255-mm length of pipe. Refer to the “Grooving Long Pipe Lengths” section.

TABLE 1- PIPE LENGTHS SUITABLE FOR GROOVING

| Steel, Stainless Steel,<br>Aluminum, and PVC<br>Pipe Size | Length – inches/mm |           |
|-----------------------------------------------------------|--------------------|-----------|
|                                                           | Minimum            | Maximum   |
| Nominal Pipe Size<br>inches/mm                            |                    |           |
| ¾<br>20                                                   | 8<br>205           | 36<br>915 |
| 1<br>25                                                   | 8<br>205           | 36<br>915 |
| 1 ¼<br>32                                                 | 8<br>205           | 36<br>915 |
| 1 ½<br>40                                                 | 8<br>205           | 36<br>915 |
| 2<br>50                                                   | 8<br>205           | 36<br>915 |
| 2 ½<br>65                                                 | 8<br>205           | 36<br>915 |
| 3<br>80                                                   | 8<br>205           | 36<br>915 |
| 3 ½<br>90                                                 | 8<br>205           | 36<br>915 |
| 4<br>100                                                  | 8<br>205           | 36<br>915 |
| 5<br>125                                                  | 8<br>205           | 32<br>815 |
| 6<br>150                                                  | 10<br>255          | 28<br>715 |
| 8<br>200                                                  | 10<br>255          | 24<br>610 |
| 10<br>250                                                 | 10<br>255          | 20<br>510 |
| 12<br>300                                                 | 12<br>305          | 18<br>460 |

CHECKING AND ADJUSTING THE TOOL PRIOR TO GROOVING

Every Victaulic roll grooving tool is checked, adjusted, and tested at the factory prior to shipment. However, before attempting to operate the tool, the following checks and adjustments should be made to ensure proper tool operation.



**WARNING**

- Always turn off the main power supply to the tool before making any tool adjustments.

Failure to follow this instruction could result in serious personal injury or death.

GROOVING ROLLS

Ensure that the proper roll set is installed on the tool for the pipe/tubing size and material that will be grooved. Roll sets are marked with the pipe size and part number, and they are color coded for the pipe material. Refer to the tables on page 46. If the proper rolls are not installed on the tool, refer to the “Roll Changing” section.



**CAUTION**

- Ensure that roll retaining bolts and nuts are tight.

Loose roll retaining bolts and nuts could cause damage to the tool and rolls.

GROOVE DIAMETER STOP ADJUSTMENT/ SELECTOR VALVE SETTING

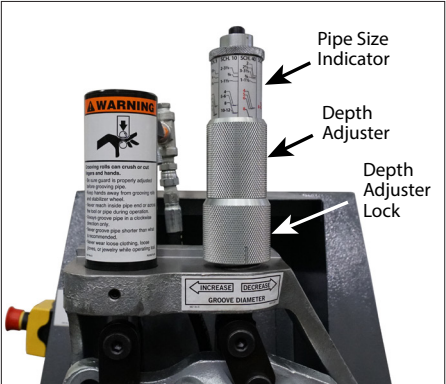
The groove diameter stop must be adjusted for each pipe size or change in wall thickness. The groove diameter is identified as the “C” dimension (reference the application groove specification links on page 47). In addition, a label is affixed to the tool that lists the “C” dimensions.

**NOTICE**

- To perform the following adjustments, Victaulic recommends the use of several short, scrap sections of pipe that are the proper material, diameter, and thickness to be grooved. Ensure that the scrap sections meet the length requirements listed in Table 1.

To achieve the proper diameter:

1. Determine the diameter and thickness of the pipe to be grooved.



2. Locate the proper diameter and thickness on the pipe size indicator. The pipe size indicator barrel can be rotated for easy viewing.



- 3a. Unlock the depth adjuster from the depth adjuster lock.
- 3b. Align the top edge of the depth adjuster with the lowest line position of the proper size and schedule markings.
- 3c. Hold the depth adjuster to prevent it from turning.
- 3d. Turn the depth adjuster lock counterclockwise to lock the depth adjuster in this position. Back off the depth adjuster lock. Align the depth adjuster with the proper diameter and thickness indicated on the pipe size indicator. Lock the depth adjuster in position with the depth adjuster lock.

## NOTICE

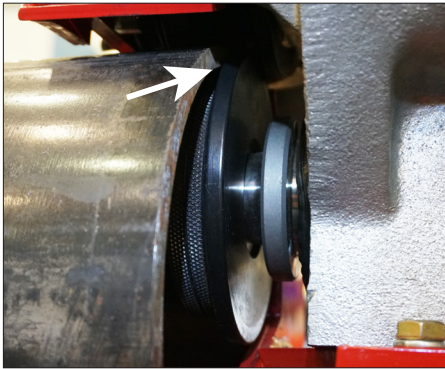
- Rotating the depth adjusters while locked will cause premature thread wear of the depth adjusters and cylinder ram.
- The markings provide an approximate groove diameter adjustment and are not exact groove diameter settings. Variations in pipe OD and wall thickness make it impossible to calibrate the groove diameter stop exactly.
- Set the initial adjustment shallow (at bottom edge of mark), groove a sample piece of pipe, then make the final adjustment.



4. Set the selector valve on the front of the tool to the color that matches the pipe size and schedule (RED or BLACK) on the pipe size indicator label.

## NOTICE

- The selector valve affects only the maximum pressure at which the upper roll forms the groove. It does not affect the rate at which the upper roll advances toward the pipe at the start of grooving, nor the rate at which the roll retracts from the pipe at the completion of the groove.
- Ram pressure during formation of the groove can have a significant effect on pipe-end flare. The recommended settings will produce accurate grooves in most situations. If excessive pipe-end flare or stalling of the drive motor occurs during operation in the high ram pressure or "RED" setting, change the selector valve setting to the low ram pressure or "BLACK" setting.



5. Insert a length of pipe over the lower roll with the pipe end against the lower-roll backstop flange.

### **! WARNING**



**Grooving rolls can crush or cut fingers and hands.**

- Always turn off the main power supply to the tool before making any tool adjustments.

- Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer during operation.
- Never reach inside the pipe ends or across the tool or pipe during operation.
- Always groove pipe in a **CLOCKWISE** direction.
- Never groove pipe that is shorter than the recommended lengths listed in this manual.
- Never wear loose clothing, jewelry, or anything that can become entangled in moving parts.



7. After a trial groove is prepared and the pipe is removed from the tool, check the groove diameter ("C" dimension) carefully. Reference the applicable groove specification links on page 47. A standard pipe tape, supplied with the tool, is the best method for checking the "C" dimension. In addition, a vernier caliper or narrow-land micrometer can be used to check this dimension at two locations (90° apart) within the groove. The average reading must be within the required groove diameter specification.

### **! CAUTION**

- The "C" dimension (groove diameter) must conform to Victaulic specifications to ensure proper joint performance.

**Failure to follow this instruction could cause joint failure, resulting in personal injury and/or property damage.**

6. Prepare a trial groove. Refer to the applicable "Grooving Operation" section.

- 8a. If the groove diameter ("C" dimension) is not within Victaulic specifications, the diameter stop must be adjusted.
- 8b. Unlock the depth adjuster from the depth adjuster lock.
- 8c. To adjust for a smaller groove diameter, turn the depth adjuster counterclockwise (as viewed from above the tool). Turn the depth adjuster lock counterclockwise to lock the depth adjuster in this position.
- 8d. To adjust for a larger groove diameter, turn the depth adjuster clockwise (when viewed from above the tool). Turn the depth adjuster lock counterclockwise to lock the depth adjuster in this position.

**NOTE:** A quarter turn either way will change the groove diameter by 0.031 inch/.79 mm. A full turn either way will change the groove diameter by 0.125 inch/3.2 mm.

## NOTICE

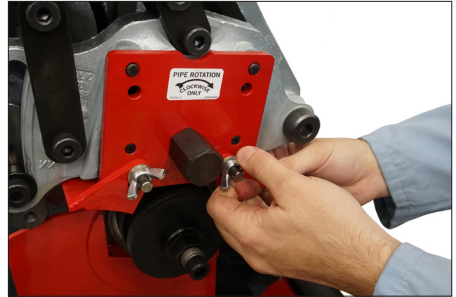
- Rotating the depth adjusters while locked will cause premature thread wear of the depth adjusters and cylinder ram.

9. Prepare another trial groove, and check the groove diameter ("C" dimension) as described in previous steps. Repeat these steps, as necessary, until the groove diameter is within specification.

## ADJUSTING THE ROLL GUARDS

The VE268 guards must be adjusted when rolls are changed or when the pipe size or wall thickness is different from previous pipe grooved.

1. Ensure that the proper roll set is installed on the tool for the pipe size and material to be grooved. Rolls are marked with the pipe size and part number, and they are color-coded according to the pipe material. Refer to the tables on page 46.



2. Loosen the wing nuts and move the adjustable guards to the full up position. Tighten the wing nuts.



3. Set the groove diameter stop to the pipe size and schedule/thickness to be grooved by backing off the depth adjuster lock and aligning the depth adjuster with the proper pipe diameter and thickness marking. Lock the depth adjuster in position with the depth adjuster lock.

**⚠ WARNING**

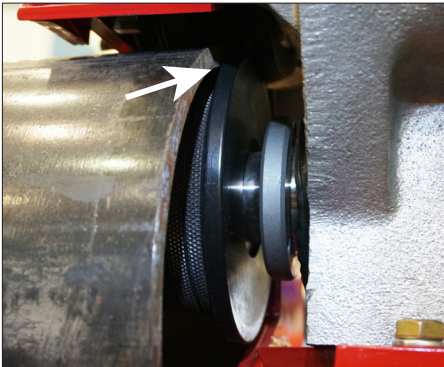


**Grooving rolls can crush or cut fingers and hands.**

- Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer.



4. Retract the pipe stabilizer, if necessary, to insert the pipe onto the lower roll by loosening the locking handle and retracting the stabilizer roller with the handwheel.



5. Insert a length of pipe that is the correct size and schedule over the lower roll. Ensure that the pipe end contacts the lower-roll backstop flange. The pipe must rest directly on top of the roll and must not be skewed to one side or the other.



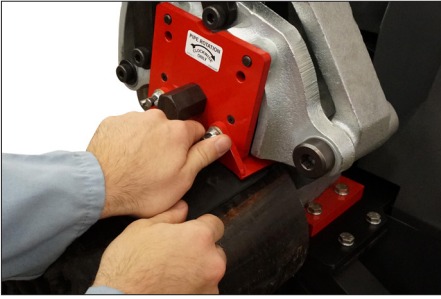
6. Turn the power switch on the side of the tool to the "ON" position. Turn the selector switch on the side of the tool to the "JOG" position.



7. With the operator on the safety foot switch side of the tool, use the safety foot switch to energize the tool motor and bring the upper roll down into firm contact with the pipe. Withdraw foot from the safety foot switch.



8. Remove the guard setting pad from its storage hook. Hold the guard setting pad firmly down against the pipe while pushing it under the adjustable guards until it contacts the upper roll.



9. Loosen the wing nuts and adjust each guard to conform to and lightly pinch the pad against the pipe. Tighten the wing nuts to secure each guard in position. Remove the guard setting pad.



10. Return the guard setting pad to the storage hook.



11. Prepare to support the pipe. Turn the selector switch on the side of the tool to the "NORMAL" position. The arm/upper roll assembly will return to its highest position, and the pipe will release.

## ⚠ CAUTION

- Use the "JOG" mode only for making adjustments to the tool and for roll changes. When the tool is left in "JOG" mode with the power on, the pipe will gradually release and fall out of the tool.
- Always turn the selector switch to the "NORMAL" position when finished making adjustments to the tool.

Failure to follow this instruction could result in personal injury and property damage.

## PIPE STABILIZER ADJUSTMENT

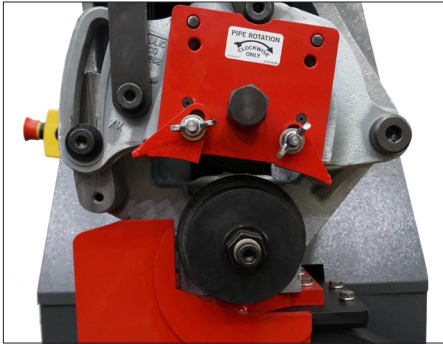
## ⚠ WARNING

- Always turn off the main power supply to the tool before making any tool adjustments.
- DO NOT reach over pipe while making adjustments.
- DO NOT make adjustments while the tool/pipe is in operation/motion.

Failure to follow these instructions could result in serious personal injury.

The pipe stabilizer for the VE268 is designed to prevent sway of short and long pipe lengths in 8 to 12-inch/219.1 to 323.9-mm diameters. The pipe stabilizer is required when grooving light-wall stainless steel pipe and 8-inch/206.4-mm copper tubing.

When the pipe stabilizer is adjusted for a selected pipe size and wall thickness, it does not require further adjustment unless pipe of a different size and wall thickness will be grooved. Pipe of the same size and wall thickness can be moved in and out of the tool without retracting the stabilizer.

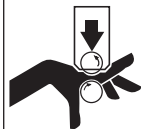


1. Ensure that the proper roll set is installed on the tool for the pipe size and material to be grooved. Rolls are marked with the pipe size and part number, and they are color-coded according to the pipe material. Refer to the tables on page 46.



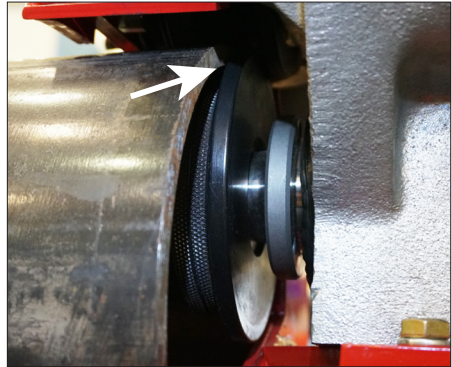
- 2a. Loosen the stabilizer locking handle.
- 2b. Using the stabilizer handwheel, retract the stabilizer roller to clear the pipe when it is inserted onto the lower roll.

### ⚠ WARNING



Grooving rolls can crush or cut fingers and hands.

- Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer.



3. Insert a length of pipe that is the correct size and schedule over the lower roll. Ensure that the pipe end contacts the lower-roll backstop flange. The pipe must rest directly on top of the roll and must not be skewed to one side or the other.

### ⚠ CAUTION

- **DO NOT** adjust the stabilizer roller to push the pipe to the left and off center from the rolls. Increased pipe-end flare and shortened roll life will result if the pipe is pushed to the left and off center.
- **DO NOT** reach across the pipe to make pipe stabilizer adjustments.
- **DO NOT** adjust the pipe stabilizer while the pipe is in motion.
- Assembly of couplings on pipe that exceeds the maximum allowable flare dimension may prevent proper pad-to-pad assembly of coupling housings and cause gasket distortion/damage.

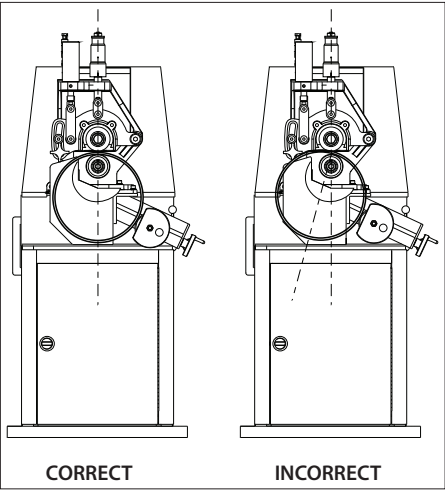
Failure to prepare pipe in accordance with all instructions may cause joint failure, resulting in personal injury and/or property damage.



4. Turn the power switch on the side of the tool to the “ON” position. Turn the selector switch on the side of the tool to the “JOG” position.



5. With the operator on the safety foot switch side of the tool, use the safety foot switch to energize the motor and bring the upper roll down into firm contact with the pipe. Withdraw foot from the safety foot switch.



6. Using the stabilizer handwheel, adjust the stabilizer roller inward to the correct position (shown in the drawing above). Tighten the locking handle.
7. Prepare to support the pipe. Turn the selector switch on the side of the tool to the “NORMAL” position. The arm/upper roll assembly will return to its highest position, and the pipe will release.



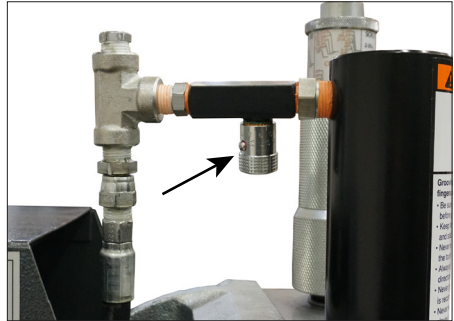
## ⚠ CAUTION

- Use the “JOG” mode only for making adjustments to the tool and for roll changes. When the tool is left in “JOG” mode with the power on, the pipe will gradually release and fall out of the tool.
- Always turn the selector switch to the “NORMAL” position when finished making adjustments to the tool.

Failure to follow this instruction could result in personal injury and property damage.

8. Complete all adjustments and groove the pipe. Refer to the applicable “Grooving Operation” section. Observe the stabilizer roller while grooving. It should remain in contact with the pipe, and the pipe should rotate smoothly without swaying from side to side. If the pipe is not rotating smoothly or is swaying from side to side, discontinue grooving and adjust the stabilizer roller further. Continue the grooving operation and make further adjustments, as necessary. DO NOT adjust the stabilizer roller too far inward, since it will skew the pipe to the left and off center, resulting in excessive pipe-end flare.

## RAM SPEED CONTROL VALVE ADJUSTMENT



The ram speed control valve is factory set for roll grooving most pipe within the tool's capacity. When excessive pipe flare or tool “stalling” occurs, the ram speed may require adjustment.



1. Turn the power switch on the side of the tool to the “OFF” position.



2. Turn the ram speed control valve knob **clockwise** 2–3 revolutions to reduce flow.

**NOTE:** The Ram Speed Control Valve features both color coding and numerical readout for easy reference.



3. Turn the power switch on the side of the tool to the “ON” position. Turn the selector switch on the side of the tool to the “NORMAL” position.
4. Follow the applicable “Grooving Operation” section to prepare a trial groove.
5. If pipe flare is still excessive, or the tool continues to stall, repeat Steps 1 to 5.

**NOTE:** The ram speed control valve affects the rate at which the upper roll forms the groove and the rate at which the upper roll advances to contact the pipe. The rate at which the upper roll retracts from the pipe will not be affected. Use of the travel stop knob minimizes the distance and time required for the upper roll to travel down to groove the pipe and limits how far the upper roll retracts.

### **! CAUTION**

**To prevent damage to the tool's hydraulics:**

- **Never operate the tool with the flow control valve completely closed.**
- **Never attempt to roll groove pipe while making an adjustment to the flow control valve.**
- **Never make adjustments to the flow control valve while the tool is under pressure.**

**Failure to follow these instructions could result in personal injury and tool damage.**

## GROOVING SHORT PIPE LENGTHS

### **! CAUTION**

- This tool must be used **ONLY** for grooving pipe with specifications that fall within the designated parameters.
- Verify that the upper and lower grooving rolls are a matched set.

**Failure to follow these instructions could damage the tool and cause product failure, resulting in property damage or personal injury.**

1. Before grooving, ensure that all instructions in the previous sections of this manual have been followed.
2. Turn on the main power supply to the tool (main breaker panel, knife switch, etc.).



3. Turn the power switch on the side of the tool to the “ON” position. Ensure that the selector switch on the side of the tool is in the “NORMAL” position. The arm/upper roll assembly will return to its highest position.



4. Depress the safety foot switch momentarily to ensure that the tool is operational. Remove foot from the switch.

## ⚠ WARNING



Grooving rolls can crush or cut fingers and hands.

- Always turn off the main power supply to the tool before making any tool adjustments.

- Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer during operation.
- Never reach inside the pipe ends or across the tool or pipe during operation.
- Always groove pipe in a **CLOCKWISE** direction.
- Never groove pipe that is shorter than the recommended lengths listed in this manual.
- Never wear loose clothing, loose gloves, or anything that can become entangled in moving parts.



5. Insert a length of pipe that is the correct size and thickness onto the lower roll. Ensure that the pipe end contacts the lower-roll backstop flange completely.



6. While manually supporting the pipe, depress and hold down the safety foot switch. The upper roll will advance and contact the pipe. Remove hands from the pipe. The operator should be positioned as shown above.



7. Continue the grooving process until the depth adjuster lock comes into contact with the top of the tool body. Continue pipe rotation for 1–2 revolutions to ensure groove completion.
8. Release the safety foot switch, and withdraw foot from the switch.
9. Prepare to support the pipe because the tool will release the pipe automatically. Remove the pipe from the tool.



10. If no more roll grooving will be performed for a while, turn the power switch on the side of the tool to the “OFF” position.

### NOTICE

- The groove diameter must be within specification for the diameter and wall thickness of pipe. The groove diameter should be checked and adjusted, as necessary, to ensure that grooves remain within specification.

## GROOVING LONG PIPE LENGTHS

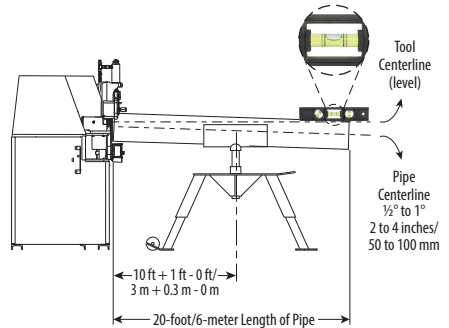
### CAUTION

- For long pipe lengths, ensure that the pipe stand is positioned properly to minimize pipe-end flare.
- DO NOT install couplings on pipe that exceeds the maximum allowable flare.
- This tool must be used ONLY for grooving pipe with specifications that fall within the designated parameters.
- Verify that the upper and lower grooving rolls are a matched set.
- Always reference the applicable groove specification links on page 47 for details.

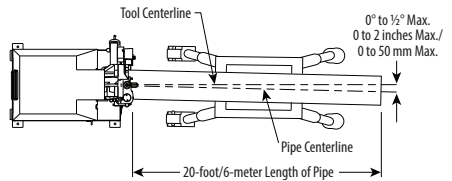
Failure to follow these instructions could damage the tool and cause product failure, resulting in property damage or personal injury.

When roll grooving pipe that exceeds the maximum length shown in Table 1, a roller-type pipe stand must be used. The roller-type pipe stand must be capable of handling the weight of the pipe, while allowing the pipe to rotate freely.

1. Ensure that the tool is level. Refer to the “Tool Setup” section for leveling requirements.



2. Place the pipe stand at a distance slightly beyond half the pipe length from the tool. Refer to the drawing above.



3. Position the pipe stand approximately 0 to 1/2 a degree to the left for the tracking angle. Refer to the drawing above. **NOTE:** When pipe flare is excessive, right-to-left tracking must be kept to a minimum. It may be necessary to use less than 1/2 a degree for the tracking angle.
4. If the tool is properly set up in a level position, but the back end of the pipe is higher than the end being grooved, the pipe may not track. In addition, excessive flare may occur on the pipe end. Refer to the “Tool Setup” section, and the drawings above, for tool setup and pipe positioning requirements.
5. Before grooving, ensure that all instructions in the previous sections of this manual have been followed.
6. Turn on the main power supply to the tool (main breaker panel, knife switch, etc.).



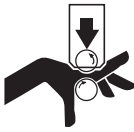
7. Turn the power switch on the side of the tool to the “ON” position. Ensure that the selector switch on the side of the tool is in the “NORMAL” position.

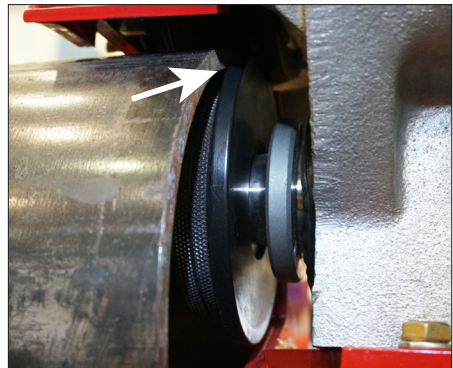


8. Press the “ENABLE” button.



9. Depress the safety foot switch momentarily to ensure that the tool is operational.

|  <b>WARNING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Grooving rolls can crush or cut fingers and hands.</p> <ul style="list-style-type: none"> <li>• Always turn off the main power supply to the tool before making any tool adjustments.</li> </ul> |
| <ul style="list-style-type: none"> <li>• Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer during operation.</li> <li>• Never reach inside the pipe ends or across the tool or pipe during operation.</li> <li>• Always groove pipe in a <b>CLOCKWISE</b> direction.</li> <li>• Never groove pipe that is shorter than the recommended lengths listed in this manual.</li> <li>• Never wear loose clothing, jewelry, or anything that can become entangled in moving parts.</li> </ul> |                                                                                                                                                                                                     |



9. Insert a length of pipe that is the correct size and thickness onto the lower roll. Ensure that the pipe end contacts the lower-roll backstop flange completely. Remove hands from the pipe.



10. The operator should be positioned as shown above.



11. To start the grooving operation, depress and hold down the safety foot switch. This will advance the upper roll into contact with the pipe. The lower roll will start rotating, and the groove will begin to form.
12. During the grooving operation, visually check the tracking of the pipe as it rotates. Ensure that the pipe remains against the lower-roll backstop flange. If the pipe does not stay in contact with the lower-roll backstop flange, stop the tool by releasing the safety foot switch, and withdraw foot from the switch. Ensure that pipe is positioned properly (refer to the “Grooving Long Pipe Lengths” section). Repeat steps 10 through 12.



- 13a. Continue the grooving process until the depth adjuster lock comes into contact with the top of the tool body. Continue pipe rotation for several revolutions to ensure groove completion.
- 13b. Release the safety foot switch, and withdraw foot from the switch.
- 13c. Remove the pipe from the tool.



- 13d. If no more roll grooving will be performed for a while, turn the power switch on the side of the tool to the “OFF” position.

## NOTICE

- The groove diameter must be within specification for the diameter and wall thickness of pipe. The groove diameter should be checked and adjusted, as necessary, to ensure that grooves remain within specification.

## ROLL CHANGING

VE268 Roll Grooving Tools are designed with rolls to accommodate several pipe sizes and materials, which eliminates the need for frequent roll changes.

When a different pipe size or material is required for grooving, the upper and lower rolls must be changed. For proper roll selection, refer to the tables on page 46.

### TRAVEL STOP KNOB REMOVAL

This applies for the following sizes:

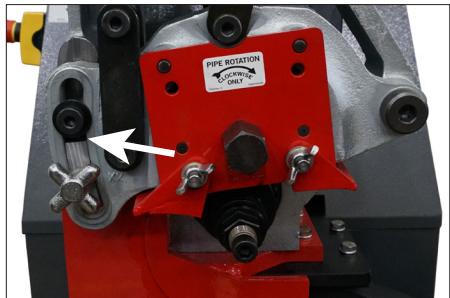
- ¾ inch/26.9 mm NPS size
- 1–1½ inch/33.7–48.3 mm NPS sizes
- 2–3½ inch/60.3–101.6 mm NPS sizes
- 2–6 inch/54.0–155.6 mm copper tubing sizes

When the travel stop knob is installed for the above-listed pipe/tubing sizes, travel of the arm/upper roll assembly is limited. Before attempting to change rolls, the travel stop knob must be removed so that the arm/upper roll can return to its highest position.

1. Turn on the main power supply to the tool (main breaker panel, knife switch, etc.).



2. Turn the power switch on the side of the tool to the “ON” position. Turn the selector switch on the side of the tool to the “JOG” position.



3. Depress and hold down the safety foot switch until the arm/upper roll assembly does not contact the threaded portion of the travel stop knob. Release the safety foot switch, and withdraw foot from the switch.



4. Unscrew the travel stop knob from the tool body by turning counterclockwise. Store the travel stop knob in the tool cabinet.



- 5a. Turn the selector switch on the side of the tool to the “NORMAL” position. The arm/upper roll assembly will return to its highest position.



- 5b. Turn the power switch on the side of the tool to the “OFF” position.

## LOWER ROLL REMOVAL FOR ¾-INCH/26.9-MM AND 1 TO 1 ½-INCH/33.7 TO 48.3-MM SIZES

### **WARNING**

- Always turn off the main power supply to the tool before changing the rolls.

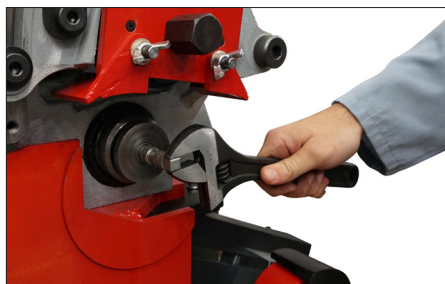
Failure to follow this instruction could result in serious personal injury.



1. Turn the power switch on the side of the tool to the “OFF” position.

### **NOTICE**

- The ¾-inch/26.9-mm and 1 to 1 ½-inch/33.7 to 48.3-mm lower roll assembly is held in position with left-hand threads and must be loosened by turning clockwise.



2. With a wrench engaged on the square end of the lower roll assembly, loosen and remove the lower roll assembly by turning **clockwise**. Store the lower roll assembly in the tool cabinet.

## LOWER ROLL REMOVAL FOR 2-INCH/ 60.3-MM AND LARGER SIZES

### **! WARNING**

- Always turn off the main power supply to the tool before changing the rolls.

Failure to follow this instruction could result in serious personal injury.



1. Turn the power switch on the side of the tool to the "OFF" position.



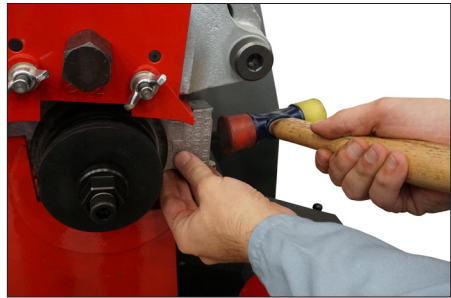
2. Using a wrench, loosen the large nut on the arbor, and back it off ¼ inch/6 mm. DO NOT remove the large nut.

### **! WARNING**

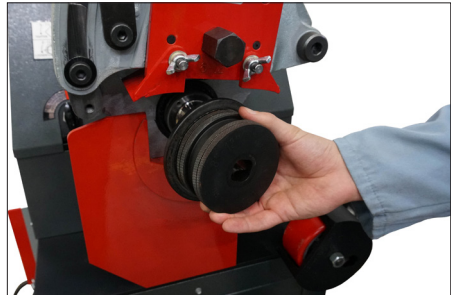


- Use only the aluminum wedge with a soft-faced hammer for removing the lower roll. Never strike the lower roll directly for any reason.
- Always wear eye protection when using the aluminum wedge.

Failure to follow these instructions could result in serious personal injury.



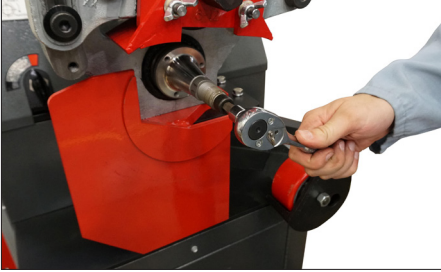
3. To loosen the lower roll from the tapered arbor, use the aluminum wedge supplied with the tool. Place the wedge behind the lower roll, and strike the wedge with a soft-faced hammer to break the lower roll loose from the taper. DO NOT strike the lower roll directly with a hammer.



4. Remove the nut, washer, and lower roll. Store these components in the tool cabinet.

### ARBOR REMOVAL FOR 2-INCH/60.3-MM AND LARGER SIZES

1. Remove the lower roll from the tool by referring to the "Lower Roll Removal for 2-inch/60.3-mm and Larger Sizes" section.



2. With a wrench engaged on the cap screw portion of the stud, loosen the stud by turning **counterclockwise**. The arbor should move outward as the stud is loosened.



3. When the stud has stopped moving the arbor outward, pull the arbor assembly out of the tool's main shaft. Store the arbor assembly in the tool cabinet.

### NOTICE

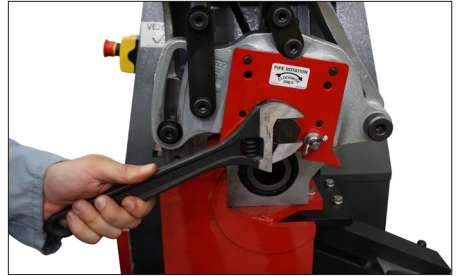
- The arbor could become difficult to remove from the main shaft if insufficient lubrication was applied. The arbor features three  $\frac{1}{4}$  – 20 UNC tapped holes so that jack bolts can be used to push out the arbor.

### ⚠ CAUTION

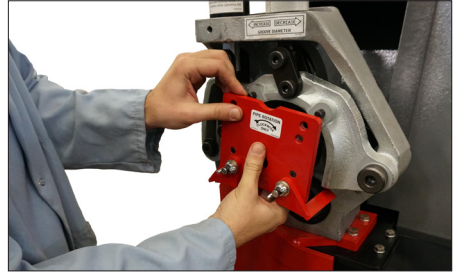
- Never operate the tool with jack bolts installed in the arbor.

Failure to follow this instruction could result in personal injury and tool damage.

### UPPER ROLL REMOVAL – ALL SIZES



1. Using a wrench, loosen and remove the upper roll bolt. Place the upper roll bolt in a safe location.

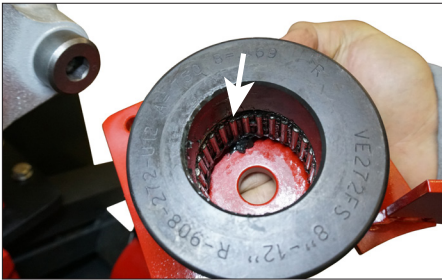


2. Remove the upper roll assembly by pulling it straight out of the tool. Store the upper roll assembly in the tool cabinet.

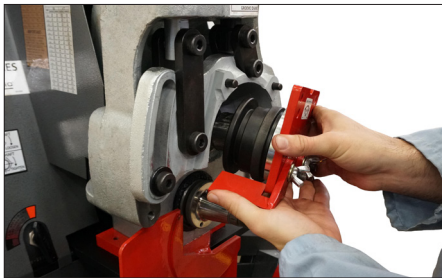
## UPPER ROLL INSTALLATION – ALL SIZES



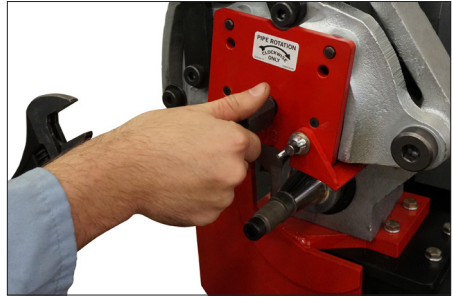
1. Prior to installation, clean all shaft surfaces and roll bores to remove any dirt and scale.



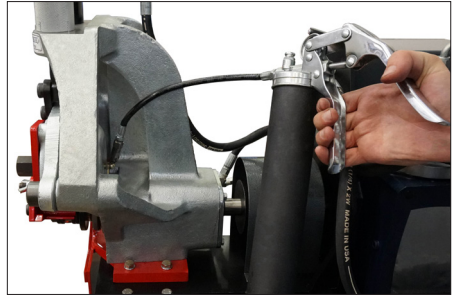
2. Inspect the roller bearing inside the upper roll for proper lubrication and movement. Inspect the roll guards for wear and freedom of movement. Repair or replace any damaged components, if necessary.



3. Slide the upper roll assembly carefully onto the upper shaft with the red plate facing out. Loosen the roll guards, if necessary, to ease installation. Ensure that the red plate engages the two pins on the arm and that it contacts the front of the upper shaft.

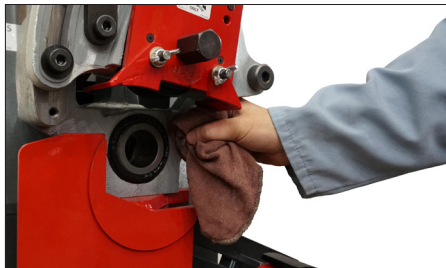


4. Insert the upper roll bolt, and tighten it securely with a wrench.



5. Lubricate upper roll bearing. Refer to the "Maintenance" section for the recommended lubricant.

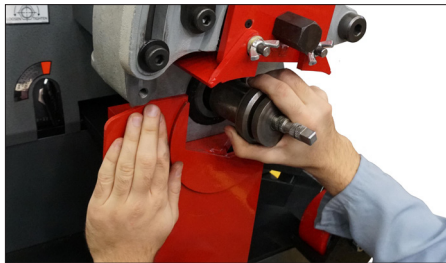
**LOWER ROLL ASSEMBLY INSTALLATION FOR  
¾-INCH/26.9-MM AND 1 TO  
1 ½-INCH/33.7 TO 48.3-MM SIZES**



1. Clean the bore of the main shaft and the lower roll assembly with a soft cloth.

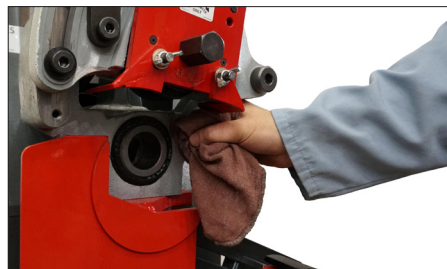


2. Apply a light coating of mechanical assembly spray (supplied with the tool) to the lower roll assembly.



- 3a. Insert the lower roll assembly carefully into the main shaft, making sure it is seated fully. It may be necessary to rotate the lower roll assembly to align its square back end with the main shaft.
- 3b. With a wrench engaged on the square end of the lower roll assembly, tighten the lower roll assembly by turning **counterclockwise**.

**ARBOR INSTALLATION PROCEDURE FOR  
2-INCH/60.3-MM AND LARGER SIZES**



1. Clean the bore of the main shaft and the arbor with a soft cloth.



2. Apply a light coating of mechanical assembly spray (supplied with the tool) to the lower roll assembly.

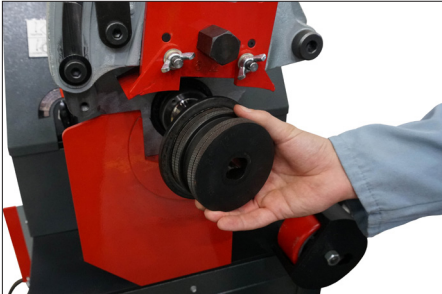


- 3a. Insert the arbor carefully into the main shaft, making sure it is seated fully. It may be necessary to rotate the arbor to align its square back end with the main shaft.
- 3b. With a wrench engaged on the cap screw portion of the stud, tighten the stud by turning **clockwise**. The arbor should move inward as the stud is tightened.

## LOWER ROLL INSTALLATION FOR 2-INCH/60.3-MM AND LARGER SIZES

### NOTICE

- The arbor must be installed prior to installing 2-inch/60.3-mm and larger size lower rolls. Refer to the “Arbor Installation Procedure for 2-inch/60.3-mm and Larger Sizes” section.



1. Install the lower roll onto the arbor. Reposition the roll guards, if necessary, to ease installation. Align the square drive of the lower roll with the square drive of the arbor.



2. Install the flat washer and large nut onto the threaded arbor stud. Fasten the large nut securely with a wrench to set the lower roll. DO NOT over-tighten the large nut.
3. Roll set installation is now complete. Before grooving, ensure that all instructions in the previous sections of this manual have been followed (i.e. adjusting the roll guards, adjusting the groove diameter stop).

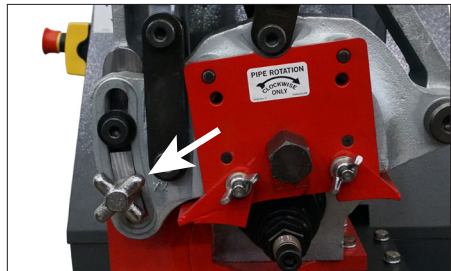
## TRAVEL STOP KNOB INSTALLATION

This applies for the following sizes:

- ¾ inch/26.9 mm NPS size
- 1 to 1½ inch/33.7 to 48.3 mm NPS sizes
- 2 to 3½ inch/60.3 to 101.6 mm NPS sizes
- 2 to 6 inch/54.0 to 155.6 mm copper tubing sizes

### NOTICE

- When roll grooving pipe sizes other than what is listed above, the travel stop knob must not be used. Store the travel stop knob in the tool cabinet when not in use.
- The ¾ – 16 UNC travel stop knob must never replace the ½ – 13 UNC socket head cap screw that limits return travel of the arm/upper roll assembly.



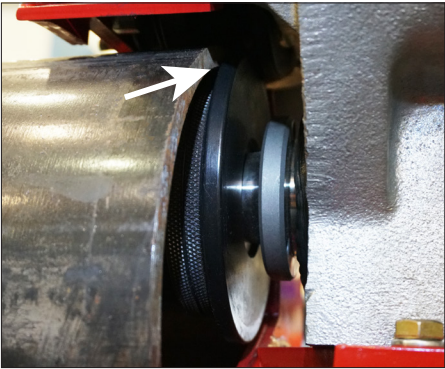
The travel stop knob is used to limit arm/upper roll assembly retraction, which minimizes upper roll travel distance and improves grooving productivity.

**WARNING**



Grooving rolls can crush or cut fingers and hands.

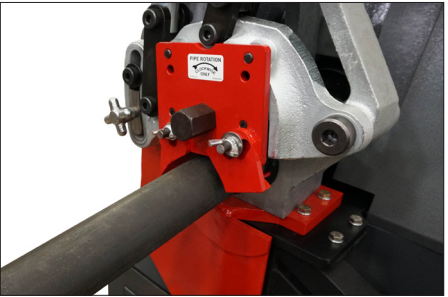
- Loading/unloading pipe will place your hands close to the rollers. Keep hands away from the grooving rolls and the roller on the pipe stabilizer.



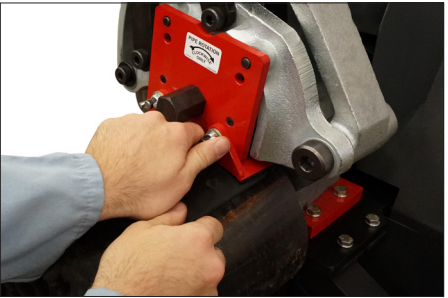
1. Insert a length of  $\frac{3}{4}$  to  $3\frac{1}{2}$ -inch/26.9 to 101.6-mm pipe that is the correct thickness onto the lower roll. Ensure that the pipe end contacts the lower-roll backstop flange completely.



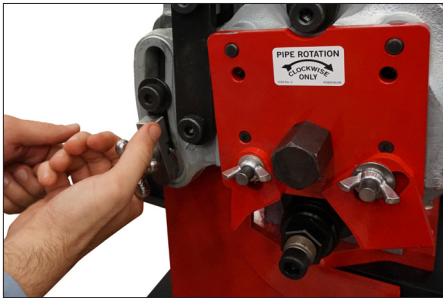
2. Turn the selector switch on the side of the tool to the “JOG” position.



3. With the operator on the safety foot switch side of the tool, manually support the pipe. Depress and hold down the safety foot switch. The upper roll will advance and contact the pipe. Remove hands from the pipe, and withdraw foot from the safety foot switch.



4. Ensure that the roll guards are adjusted properly. Refer to the “Adjusting the Roll Guards” section.



5. Thread the aluminum travel stop knob into the  $\frac{3}{8}$  – 16 UNC tapped hole located on the face of the slide.



- 6a. Prepare to support the pipe. Turn the selector switch on the side of the tool to the “NORMAL” position. The arm/upper roll assembly will return to its highest position, and the pipe will release.



- 6b. Turn the power switch on the side of the tool to the “OFF” position.

## MAINTENANCE

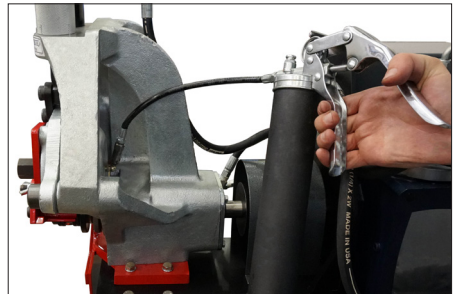
| <b>⚠ DANGER</b>                                                                                    |                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                    | <ul style="list-style-type: none"> <li>Always turn off the main power supply to the tool before making any tool adjustments or before performing any maintenance.</li> </ul> |
| <p><b>Failure to follow this instruction could result in death or serious personal injury.</b></p> |                                                                                                                                                                              |

This section provides information about keeping tools in proper operating condition and guidance for making repairs when it becomes necessary. Preventive maintenance during operation will pay for itself in repair and operating savings.

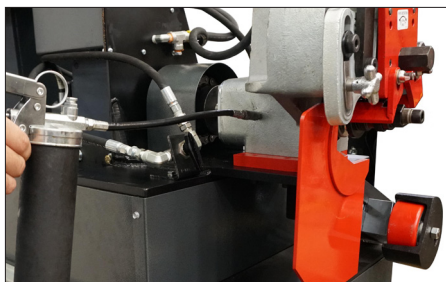
Replacement parts must be ordered from Victaulic to ensure proper and safe operation of the tool.

### LUBRICATION

After every 8 hours of operation, lubricate the tool. Always lubricate the upper roll bearings when rolls are changed.



1. Grease the upper roll bearings every time roll changes are made and after every 8 hours of operation. A grease fitting is provided, as shown above. Refer to the applicable “Recommended Lubricants” table for the proper grease.



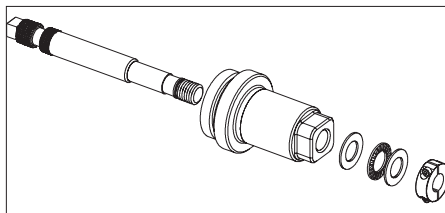
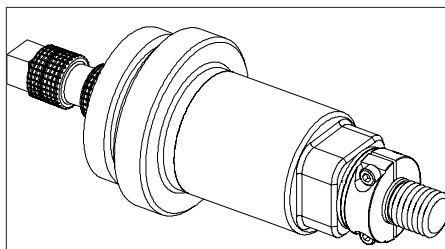
2. Grease the main shaft bearings through the grease fitting on the side of the tool, as shown above. Refer to the applicable "Recommended Lubricants" table for the proper grease.



3. Lubricate the linkage mechanisms, the arm pivot point, and the arm sliding surfaces. A heavy-duty spray lubricant may be used, or grease may be applied by hand. Refer to the applicable "Recommended Lubricants" table for the proper grease.



4. Lubricate the stabilizer wheel through the grease fitting, as shown above. Refer to the applicable "Recommended Lubricants" table for the proper grease.



- 5a. After every 40 hours of operation, clean and lubricate the  $\frac{3}{4}$ -inch/26.9 and 1 to 1  $\frac{1}{2}$ -inch/33.7 to 48.3-mm lower roll assemblies.
- 5b. Remove the cap screws and disassemble the two-piece collar. Remove the collar, needle bearing, and washers.
- 5c. Remove the lower roll from the arbor. Clean the  $\frac{3}{4}$ -inch/26.9 and 1 to 1  $\frac{1}{2}$ -inch/33.7 to 48.3-mm lower roll and lightly lubricate with the proper lubricant (mechanical assembly spray, supplied with the tool and available from Victaulic).
- 5d. Reassemble the  $\frac{3}{4}$ -inch/26.9 and 1 to 1  $\frac{1}{2}$ -inch/33.7 to 48.3-mm lower roll assembly. Lubricate the needle bearing.

### CHECKING AND FILLING HYDRAULIC OIL

1. The hydraulic oil level shall be checked every month or 50 operating hours, whichever comes first. Check the hydraulic oil level preferably before tool startup. The level should be no lower than  $\frac{3}{4}$  inch/19 mm from the top of the tank. Add recommended hydraulic oil to no higher than  $\frac{1}{2}$  inch/13 mm from the top of the tank. The  $\frac{1}{2}$ -inch/13-mm clearance is required to accommodate expansion of the hydraulic oil. Refer to the “Recommended Lubricants” table for the proper hydraulic oil.

### REPLACING HYDRAULIC OIL AND FILTER

Replace the hydraulic oil and hydraulic oil filter annually or every 2,000 operating hours, whichever comes first.



1. Remove the hydraulic breather cap on top of the hydraulic tank.



2. Remove the drain plug in the hydraulic line next to the tank. Allow the oil to drain into a container that is at least 1½ gallons/6 liters.
3. With an oil filter wrench, loosen the oil filter. Remove the oil filter by hand.
4. Lubricate the oil filter gasket lightly with hydraulic oil.

5. Fill the new oil filter with hydraulic oil and install it until hand tight.
6. Replace the drain plug in the hydraulic line next to the tank.
7. Add recommended hydraulic oil to no higher than  $\frac{1}{2}$  inch/13 mm from the top of the tank. Refer to the “Recommended Lubricants” table for the proper hydraulic oil.
8. Follow the “Air Bleeding” section.

### NOTICE

- Reference local ordinances regarding the proper disposal of hydraulic oil.

### AIR BLEEDING

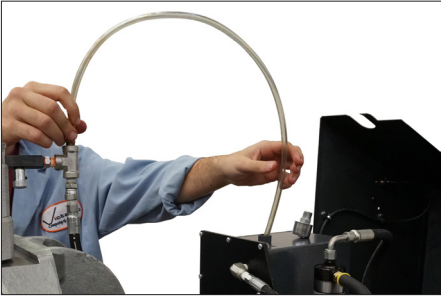
1. Ensure that the hydraulic oil level is no higher than  $\frac{1}{2}$  inch/13 mm from the top of the tank.



2. Remove the plug from the tee fitting near the hydraulic cylinder.



3. Install the clear bleeder tube, supplied with the tool, hand tight into the tee fitting.



4. With the hydraulic breather cap on top of the hydraulic tank removed, insert the end of the clear bleeder tube into the hydraulic tank so the tube end is submerged in the hydraulic fluid.
5. Connect the tool to the proper power supply.

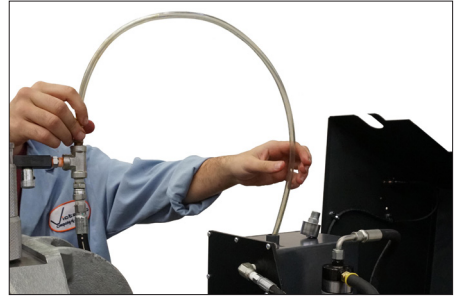


6. Turn the power switch on the side of the tool to the “ON” position. Turn the selector switch on the side of the tool to the “JOG” position.

### **WARNING**

- The lower roll will rotate when the safety foot switch is depressed.
- Avoid contact with the lower roll as it rotates.

Failure to follow these instructions could result in serious personal injury.



7. Depress the safety foot switch and observe the hydraulic fluid flowing through the clear bleeder tube. The hydraulic fluid should contain air bubbles. Continue running the fluid through the bleeder tube for a minimum of five minutes. During this time, lightly tap on all steel hydraulic lines to free air that is trapped on the inside walls. Manually pinch and release the hydraulic hose several times to free trapped air inside the cylinder. Rotate the selector valve to release trapped air inside each line. After the hydraulic fluid flows through the clear bleeder tube without any air bubbles, continue running the tool for a minimum of three minutes. Release the safety foot switch.



8. Remove the clear bleeder tube from the tee fitting and hydraulic tank. Install the plug into the tee fitting. Ensure that air is not allowed back into the tee fitting during installation of the plug.



9. Add recommended hydraulic oil to no higher than ½ inch/13 mm from the top of the tank. Refer to the “Recommended Lubricants” table for the proper hydraulic oil. Re-install the hydraulic breather cap on top of the hydraulic tank.



10. Set the depth adjuster lock on the tool to obtain a ¼-inch/6-mm gap between the depth adjuster lock and the tool body.



11. Set the selector valve on the front of the tool to the “BLACK” setting.



12. Turn the selector switch on the side of the tool to the “NORMAL” position.

## ! WARNING

- The lower roll will rotate when the safety foot switch is depressed.
- Avoid contact with the lower roll as it rotates.

Failure to follow these instructions could result in serious personal injury.



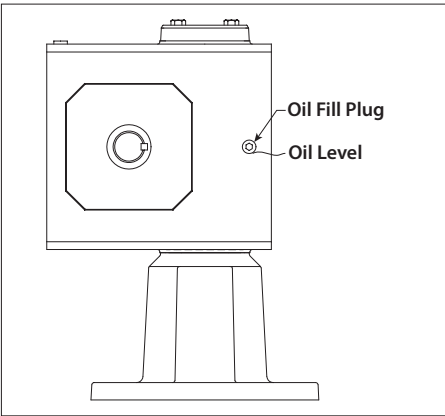
13. Depress and hold down the safety foot switch, and observe the movement of the hydraulic ram. The hydraulic ram should move down ¼ inch/6 mm rapidly. Release the safety foot switch. The hydraulic ram should return to its full up position. Repeat this procedure several times.

14. Set the selector valve on the front of the tool to the “RED” position, and repeat Step 13.
15. If the slide does not move rapidly in the downward direction, repeat Steps 2 to 14.



16. Turn the power switch on the side of the tool to the “OFF” position.

### CHECKING THE GEAR REDUCER OIL LEVEL



1. Remove the oil fill plug from the side of the gear reducer. The oil level should be even with the bottom of the hole.
2. If oil is not at the proper level, use the appropriate oil to bring the level up to the bottom of the hole. Refer to the tag on the gear reducer for the proper oil. **NOTE:** The gear reducer’s oil capacity is 60 fluid ounces/1774 milliliters.

## RECOMMENDED LUBRICANTS

### BEARING AND SLIDE GREASE

(General Purpose EP Lithium Base Grease)

| Manufacturer          | Product               |
|-----------------------|-----------------------|
| BP Amoco              | Energrease LC-EP2     |
| Gulf Oil Corp.        | Gulfcrown Grease EP#2 |
| Lubriplate            | No. 630-2             |
| Mobil Oil Corp.       | Mobilux EP2           |
| Pennzoil Products Co. | Pennlith EP 712 Lube  |
| Shell Oil Co.         | Alvania EP2           |
| Sun Refining          | Sun Prestige 742 EP   |
| Texaco Inc.           | Multifak EP2          |

### GEAR OIL

Refer to the tag located on the gear reducer.

### HYDRAULIC OIL

(High Pressure, Anti-Wear/Anti-Foam Hydraulic Oil ISO Grade 32)

| Manufacturer          | Product          |
|-----------------------|------------------|
| BP Amoco              | Energol HLP-HM32 |
| Gulf Oil Corp.        | Harmony 32 AW    |
| Kendall Refining Co.  | Kenoil R&O AW-32 |
| Lubriplate            | HO-o             |
| Mobil Oil Corp.       | Mobil DTE 24     |
| Pennzoil Products Co. | Pennzbell AW32   |
| Shell Oil Co.         | Tellus 32        |
| Sun Refining          | Survis 832       |
| Texaco Inc.           | Rando            |

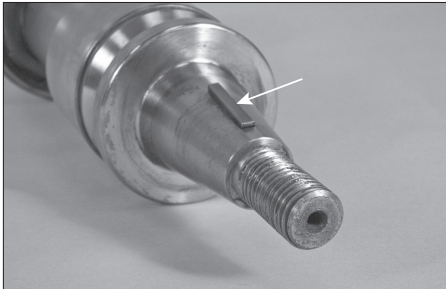
## LEGACY TOOL FEATURES

### KEYLESS ARBORS AND UNIVERSAL LOWER ROLLS

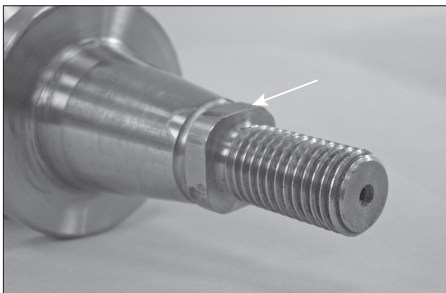
In the 1990s, Victaulic introduced an improved “keyless” method for transmitting grooving power between the arbor and lower roll. This “keyless” design applies to the lower rolls and arbor only. All existing upper roll sets are compatible with all lower roll types, as described in this section. The possibility of losing or shearing Woodruff keys is eliminated with this “keyless” method.

The “keyless” lower grooving rolls still allow hands-free grooving for short pipe lengths, as listed in the “Pipe Length Requirements” section.

1. It is important to determine which type of arbor is available for the tool.

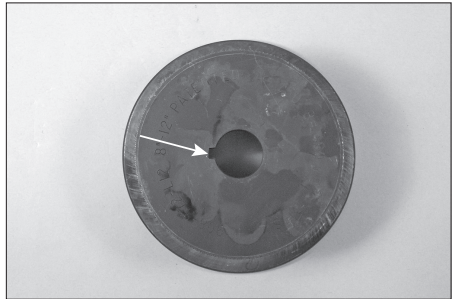


The keyed-type arbor contains a Woodruff key and can be used with new, universal-type lower rolls and older-type lower rolls.

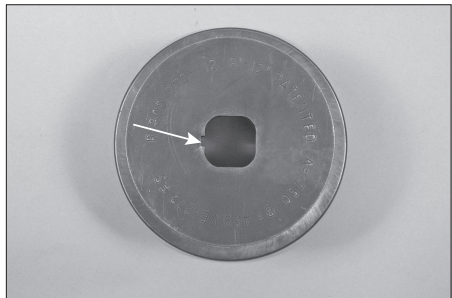


The keyless-type arbor contains a square drive and can be used ONLY with the new, universal-type lower rolls.

2. It is important to determine which type of lower rolls are available for the tool.



The “key-drive only” lower rolls, shown in the photo above, have a circular bore and can be used ONLY with the keyed-type arbors that contain the Woodruff key. Refer to the photo in the previous column for the keyed-type arbor.



The “universal” lower rolls, shown in the photo above, have a square bore that allows for easy installation onto the “keyless” arbor. In addition, these “universal” lower rolls contain a keyway for use with keyed-type arbors.

### CAUTION

- DO NOT attempt to install a “key-drive only” lower roll onto a tool that has a “keyless” arbor.

Failure to follow this instruction could result in damage to the arbor and lower roll.

## ACCESSORIES

### VAPS112 VICTAULIC ADJUSTABLE PIPE STAND



The Victaulic VAPS112 Pipe Stand is a portable, adjustable, roller-type pipe stand that contains four legs for additional stability. The VAPS112 supports pipe sizes  $\frac{3}{4}$  to 12 inches/26.9 to 323.9 mm (1½-foot/0.5-meter to full, single 20-foot/6-meter random lengths) and has a load rating of 1075 pounds/490 kilograms. The turnstile design permits ease of grooving for both pipe ends. Contact Victaulic for details.

#### OPTIONAL ROLLS

Refer to the tables on page 46, which identify rolls that are available for different pipe materials and groove specifications.

### VAPS224 VICTAULIC ADJUSTABLE PIPE STAND



The Victaulic VAPS224 Pipe Stand contains features that are similar to the VAPS112, but supports pipe sizes 2 to 24 inches/60.3 to 610.0 mm (1½-foot/0.5-meter to full, single 20-foot/6-meter random lengths) and has a load rating of 1800 pounds/817 kilograms. Contact Victaulic for details.

## PARTS ORDERING INFORMATION

When ordering parts, the following information is required for Victaulic to process the order and send the correct part(s). Request the RP-VE268 Repair Parts List for detailed drawings and parts listings.

1. Tool Model Number – VE268
2. Tool Series Number – The serial number can be found on the side of the tool on the nameplate
3. Quantity, Part Number, and Description
4. Where to Send the Part(s) – Company name and address
5. To Whose Attention to Send the Part(s)
6. Purchase Order Number
7. Billing Address

Parts can be ordered by calling 1-800-PICK VIC.

## TROUBLESHOOTING

| PROBLEM                                                                                      | POSSIBLE CAUSE                                                                                                                                                                                                                                                                                                                                                     | SOLUTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pipe will not stay in grooving rolls.                                                        | Incorrect pipe positioning of long pipe length.<br>Lower roll and pipe are not rotating clockwise.                                                                                                                                                                                                                                                                 | Refer to the "Grooving Long Pipe Lengths" section.<br>Refer to the "Power Hookup and Verification of Pipe Rotation Direction" section.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Pipe stops rotating during grooving.                                                         | Rust or dirt buildup is present on the lower roll.<br><br>Rust or dirt is excessively heavy inside the pipe end.<br><br>Excessive ram pressure.<br><br>Ram speed is not set correctly.<br><br>Worn grooving rolls.<br><br>The main breaker has tripped and/or thermal overloads in the motor starter have tripped.<br><br>The Woodruff keys are broken or missing. | Remove rust or dirt accumulation from the lower roll with a stiff wire brush.<br><br>Remove heavy rust and dirt from inside the pipe end.<br><br>Reduce ram pressure by turning the selector valve on the front of the tool to the <b>"BLACK"</b> setting.<br><br>Refer to the "Ram Speed Control Valve Adjustment" section.<br><br>Inspect the lower roll for worn knurls. Replace the lower roll if excessive wear is present.<br><br>Reset the breaker and/or motor starter thermal units.<br><br>Remove the lower roll and insert the punch tool into the key removal hole(s). Press out the broken key and install the new key (supplied with the tool). Reinstall the lower roll. |
| While grooving, loud squeaks echo through the pipe.                                          | Incorrect pipe support positioning of a long pipe length. Pipe is "over-tracking."<br><br>Pipe is not cut square.<br><br>Pipe is rubbing excessively on the lower-roll backstop flange.<br><br>Ram speed is not set correctly.                                                                                                                                     | Move the pipe support to the right. Refer to the "Grooving Long Pipe Lengths" section.<br><br>Cut the pipe end squarely.<br><br>Remove the pipe from the tool, and apply a light coating of bandsaw blade wax to the face of the pipe end.<br><br>Refer to the "Ram Speed Control Valve Adjustment" section.                                                                                                                                                                                                                                                                                                                                                                            |
| During grooving, loud thumps or bangs occur approximately once every revolution of the pipe. | Pipe has a pronounced weld seam.                                                                                                                                                                                                                                                                                                                                   | For 12-inch/323.9-mm and smaller pipe sizes, raised internal and external weld beads and seams must be ground flush with the pipe surface 2 inches/50 mm back from the pipe ends.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Pipe flare is excessive.                                                                     | Pipe support is adjusted too high for long pipe.<br><br>Tool is tilted forward (out of level) while grooving long pipe.<br><br>Incorrect pipe support positioning of long pipe. Pipe is "over-tracking."<br><br>Pipe stabilizer is adjusted too far inward.<br><br>Ram speed is not set correctly.<br><br>Excessive ram pressure.                                  | Refer to the "Grooving Long Pipe Lengths" section.<br>Refer to the applicable "Tool Setup" section.<br><br>Move the pipe support to the right. Refer to the "Grooving Long Pipe Lengths" section.<br><br>Back off the pipe stabilizer to the furthest point where it still stabilizes the pipe effectively.<br><br>Refer to the "Ram Speed Control Valve Adjustment" section.<br><br>Reduce ram pressure by turning the selector valve on the front of the tool to the <b>"BLACK"</b> setting.                                                                                                                                                                                          |
| Larger diameter pipe sways or vibrates from side to side.                                    | Incorrect pipe stabilizer adjustment.                                                                                                                                                                                                                                                                                                                              | Move the pipe stabilizer in or out until the pipe rotates smoothly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

# TROUBLESHOOTING (CONTINUED)

| PROBLEM                                                                                           | POSSIBLE CAUSE                                                                                                                                                                                                | SOLUTION                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The tool will not groove the pipe, or the tool comes up to operating pressure excessively slowly. | Air is present in the hydraulic system.<br><br>Pipe is beyond the wall thickness or pipe yield strength capacity of the tool.                                                                                 | Refer to the "Air Bleeding" section.<br><br>Refer to the table on page 45.                                                                                                                                                                                  |
| Pipe groove diameters do not meet Victaulic specifications.                                       | Groove diameter stop is not adjusted properly.<br><br>Pipe is beyond the wall thickness or pipe yield strength capacity of the tool.                                                                          | Refer to the "Groove Diameter Stop Adjustment" section.<br><br>Refer to the table on page 45.                                                                                                                                                               |
| The "A" Gasket Seat or "B" Groove Width dimensions do not meet Victaulic specifications.          | Upper roll bearing is not lubricated adequately.<br><br>Incorrect upper roll, lower roll, or both installed on the tool<br><br>Pipe not inserted fully onto the lower roll, or pipe is not tracking properly. | Refer to the "Maintenance" section.<br><br>Install the correct rolls. Refer to the tables on page 46.<br><br>Make sure pipe is against the lower-roll backstop flange. Refer to the "Grooving Long Pipe Lengths" section for proper pipe stand positioning. |

In the event of tool malfunction outside the scope of the troubleshooting section, contact Victaulic for assistance.

## NOTICE

- The "Maximum Pipe Size and Wall Thickness Capacity" table below is accurate as of the date printed on the back cover of this manual. For the most up-to-date information, reference Victaulic publication 24.01, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link:  
<https://www.victaulic.com/assets/uploads/literature/24.01.pdf>



## VE268 RATINGS - MAXIMUM PIPE SIZE AND WALL THICKNESS CAPACITY (OGS AND OGS-200)

| (OGS AND OGS-200) |                     |       | Pipe Size (inches/mm)         |      |       |       |                              |                               |      |       |                         |       |                   |       |                             |        |  |
|-------------------|---------------------|-------|-------------------------------|------|-------|-------|------------------------------|-------------------------------|------|-------|-------------------------|-------|-------------------|-------|-----------------------------|--------|--|
| Model             | Pipe Material       | Notes | ¾ 20                          | 1 25 | 1¼ 32 | 1½ 40 | 2 50                         | 2½ 65                         | 3 80 | 3½ 90 | 4 100                   | 5 125 | 6 150             | 8 200 | 10 250                      | 12 300 |  |
| VE268             | Steel               |       | Sch. 5 – 40<br>1.7 – 8.2 mm   |      |       |       |                              |                               |      |       |                         |       |                   |       | Sch. 5 – 20<br>3.4 – 6.4 mm |        |  |
|                   | Steel (OGS-200)     |       |                               |      |       |       | Sch. 40 – 80<br>3.9 – 7.6 mm |                               |      |       | Sch. 40<br>6.0 – 7.1 mm |       |                   |       |                             |        |  |
|                   | Stainless           |       | Sch. 40S<br>2.9 – 8.2 mm      |      |       |       |                              |                               |      |       |                         |       |                   |       |                             |        |  |
|                   | Stainless (OGS-200) |       |                               |      |       |       | Sch. 40S<br>3.9 – 7.1 mm     |                               |      |       |                         |       |                   |       |                             |        |  |
|                   | Lt. Wall SS         |       | Sch. 5S – 10S<br>1.7 – 4.6 mm |      |       |       |                              |                               |      |       |                         |       |                   |       |                             |        |  |
|                   | Aluminum            | 1     |                               |      |       |       | Sch. 5 – 40<br>1.7 – 8.2 mm  |                               |      |       |                         |       |                   |       | Sch. 5 – 20<br>3.4 – 6.4 mm |        |  |
|                   | PVC Plastic         |       |                               |      |       |       | Sch. 40<br>3.9 mm            | Sch. 40 – 80<br>5.2 – 11.0 mm |      |       |                         |       | Sch. 40<br>8.2 mm |       |                             |        |  |
|                   | Copper              |       |                               |      |       |       | K, L, M and DWV              |                               |      |       |                         |       |                   |       |                             |        |  |

<sup>1</sup> 6061-T4 or 6063-T4 Alloy must be used.

**ORIGINAL GROOVE SYSTEM (OGS)  
ROLL PART NUMBERS  
STEEL AND SCHEDULE 40 STAINLESS STEEL  
PIPE - COLOR CODED BLACK**

(For light-wall stainless steel pipe, refer to separate table on this page)

| Pipe Size<br>inches/mm | Roll Part<br>Numbers                                                           |
|------------------------|--------------------------------------------------------------------------------|
| ¾<br>20                | Lower Roll<br>R900268LA1<br>Upper Roll<br>R9A0268U02<br>Roll Set<br>R900268001 |
| 1 – 1 ½<br>25 – 40     | Lower Roll<br>R901268LA2<br>Upper Roll<br>R9A0268U02<br>Roll Set<br>R900268002 |
| 2 – 3 ½<br>50 – 90     | Lower Roll<br>R902272L03<br>Upper Roll<br>R9A2272U06<br>Roll Set<br>R902272003 |
| 4 – 6<br>100 – 150     | Lower Roll<br>R904272L06<br>Upper Roll<br>R9A2272U06<br>Roll Set<br>R904272006 |
| 8 – 12<br>200 – 300    | Lower Roll<br>R908272L12<br>Upper Roll<br>R9A8272U12<br>Roll Set<br>R908272012 |

**ENDSEAL “ES”  
ROLL PART NUMBERS  
STEEL PIPE - COLOR CODED BLACK**

| Pipe Size<br>inches/mm | Roll Part<br>Numbers                                                           |
|------------------------|--------------------------------------------------------------------------------|
| 2 – 3 ½<br>50 – 90     | Lower Roll<br>RZ02272L03<br>Upper Roll<br>RZA2272U03<br>Roll Set<br>RZ02272003 |
| 4 – 6<br>100 – 150     | Lower Roll<br>RZ04272L06<br>Upper Roll<br>RZA4272U06<br>Roll Set<br>RZ04272006 |
| 8 – 12<br>200 – 300    | Lower Roll<br>RZ08272L12<br>Upper Roll<br>RZA8272U12<br>Roll Set<br>RZ08272012 |

**ORIGINAL GROOVE SYSTEM (OGS)  
ROLL PART NUMBERS  
ALUMINUM AND PVC PLASTIC PIPE -  
COLOR CODED YELLOW ZINC**

| Pipe Size<br>inches/mm | Roll Part<br>Numbers                                                           |
|------------------------|--------------------------------------------------------------------------------|
| 2* – 3 ½<br>50 – 90    | Lower Roll<br>RP02272L03<br>Upper Roll<br>RPA2272U06<br>Roll Set<br>RP02272003 |
| 4 – 6<br>100 – 150     | Lower Roll<br>RP04272L06<br>Upper Roll<br>RPA2272U06<br>Roll Set<br>RP04272006 |
| 8 – 12<br>200 – 300    | Lower Roll<br>RP08272L12<br>Upper Roll<br>RPA8272U12<br>Roll Set<br>RP08272012 |

\* Part number RP02272L02 - Special lower roll exclusively for grooving 2-inch/50-mm Sch. 80 PVC

**ORIGINAL GROOVE SYSTEM (OGS)  
ROLL PART NUMBERS  
SCHEDULE 5S AND 10S STAINLESS STEEL  
PIPE - COLOR CODED SILVER**

| Pipe Size<br>inches/mm | Roll Part<br>Numbers                                                           |
|------------------------|--------------------------------------------------------------------------------|
| 2 – 3 ½<br>50 – 90     | Lower Roll<br>RX02272L03<br>Upper Roll<br>RXA2272U06<br>Roll Set<br>RX02272003 |
| 4 – 6<br>100 – 150     | Lower Roll<br>RX04272L06<br>Upper Roll<br>RXA2272U06<br>Roll Set<br>RX04272006 |
| 8 – 12<br>200 – 300    | Lower Roll<br>RX08272L12<br>Upper Roll<br>RXA8272U12<br>Roll Set<br>RX08272012 |

**ORIGINAL GROOVE SYSTEM (OGS)  
ROLL PART NUMBERS  
CTS US STANDARD ASTM DRAWN COPPER  
TUBING - COLOR CODED COPPER**

| Pipe Size<br>inches | Roll Part<br>Numbers                                                           |
|---------------------|--------------------------------------------------------------------------------|
| 2 – 6               | Lower Roll<br>RR02272L06<br>Upper Roll<br>RRA2272U08<br>Roll Set<br>RR02272006 |
| 8                   | Lower Roll<br>RR08272L08<br>Upper Roll<br>RRA2272U08                           |



# OGS GROOVE SPECIFICATIONS

For the most up-to-date information regarding OGS roll groove specifications, reference the current revision of Victaulic publication 25.01, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link: <https://www.victaulic.com/assets/uploads/literature/25.01.pdf>



# ENDSEAL “ES” GROOVE SPECIFICATIONS

For the most up-to-date information regarding EndSeal “ES” roll groove specifications, reference the current revision of Victaulic publication 25.02, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link: <https://www.victaulic.com/assets/uploads/literature/25.02.pdf>



# COPPER TUBING GROOVE SPECIFICATIONS

For the most up-to-date information regarding copper tubing roll groove specifications, reference the current revision of Victaulic publication 25.06, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link: <https://www.victaulic.com/assets/uploads/literature/25.06.pdf>



# ADDITIONAL RESOURCES

For additional information on 24-inch/DN600 and smaller Victaulic mechanical piping products for carbon steel, stainless steel, aluminum, and CPVC/PVC pipe, reference the current revision of the I-100 Field Installation Handbook, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link: <https://www.victaulic.com/assets/uploads/literature/I-100.pdf>



For additional information on Victaulic Copper Connection Products, reference the current revision of the I-600 Field Installation Handbook, which can be viewed/downloaded by scanning the mobile QR code link to the right, or by clicking on this desktop link: <https://www.victaulic.com/assets/uploads/literature/I-600.pdf>



# EC DECLARATION OF CONFORMITY

In Accordance with the Machinery Directive 2006/42/EC

**Victaulic Company**, headquartered at 4901 Kesslersville Road, Easton, PA 18040, USA, hereby declares that the machinery listed below complies with the essential safety requirements of the Machinery Directive, 2006/42/EC.

|                                   |                                                                                                                                                                                         |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Models:</b>            | VE268, VE269                                                                                                                                                                            |
| <b>Serial No. :</b>               | Refer to Machinery Nameplate                                                                                                                                                            |
| <b>Product Description:</b>       | Pipe Roll Grooving Tool                                                                                                                                                                 |
| <b>Conformity Assessment:</b>     | 2006/42/EC, Annex I                                                                                                                                                                     |
| <b>Reference Standards:</b>       | EN ISO 12100 : 2010<br>EN IEC 60204-1:2006+A1:2009<br>EN ISO 13857 : 2008                                                                                                               |
| <b>Technical Documentation:</b>   | The relevant technical documentation prepared in accordance with Annex VII (A) of the Machinery Directive 2006/42/EC, will be made available upon request to the governing authorities. |
| <b>Authorized Representative:</b> | Victaulic Company<br>c/o Victaulic Europe BVBA<br>Prijkelstraat 36<br>9810, Nazareth<br>Belgium                                                                                         |

Signed for and on behalf of Victaulic Company,

Mr. Len R. Swantek  
Director – Global Regulatory Compliance  
Machinery Manufacturer Representative

Place of Issue: Easton, Pennsylvania, USA

Date of Issue: November 20, 2019

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## UK DECLARATION OF CONFORMITY

In Accordance with The Supply of Machinery (Safety) Regulations 2008 No. 1597

**Victaulic Company**, headquartered at 4901 Kesslersville Road, Easton, PA 18040, USA, hereby declares that the machinery listed below complies with the essential safety requirements of The Supply of Machinery (Safety) Regulations 2008 No. 1597.

|                                   |                                                                                                                                                                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Models:</b>            | VE268<br>VE269                                                                                                                                                                                                  |
| <b>Serial No. :</b>               | Refer to Machinery Nameplate                                                                                                                                                                                    |
| <b>Product Description:</b>       | Pipe Roll Grooving Tool                                                                                                                                                                                         |
| <b>Conformity Assessment:</b>     | 2008 No. 1597, Annex I                                                                                                                                                                                          |
| <b>Reference Standards:</b>       | BS EN ISO 12100 : 2010<br>BS EN ISO 13857 : 2019<br>BS EN ISO 14120 : 2015                                                                                                                                      |
| <b>Technical Documentation:</b>   | The relevant technical documentation prepared in accordance with Annex VII (A) of The Supply of Machinery (Safety) Regulations 2008 No. 1597, will be made available upon request to the governing authorities. |
| <b>Authorized Representative:</b> | Victaulic Company<br>c/o Victaulic Europe BVBA<br>Units B1 & B2<br>Cockerell Close off Gunnels<br>Wood Road<br>Stevenage, Hertfordshire<br>SG1 2NB, United Kingdom                                              |

Signed for and on behalf of Victaulic Company,

Mr. Len R. Swantek  
Director – Global Regulatory Compliance  
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Place of Issue: Easton, Pennsylvania, USA

Date of Issue: May 14, 2021

# VE268 Roll Grooving Tool

